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A Report on
EDUCATIONAL TELEVISION ACTIVITIES
IN PENNSYLVANIA

July 1, 1952 -- December 9, 1952

AN EXAMPLE OF DEMOCRATIC SOCIAL ACTION



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The Pennsylvania State College

For THE STEERING COMMITTEE:
THE JOINT COMMITTEE ON
EDUCATIONAL TELEVISION FOR PENNSYLVANIA

PY T2692.1

A REPORT ON EDUCATIONAL TELEVISION ACTIVITIES IN PENNSYLVANIA

1 July - 9 December 1952

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FOR

THE STEERING COMMITTEE

OF

THE JOINT COMMITTEE ON EDUCATIONAL TELEVISION FOR PENNSYLVANIA

April 1953

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FOREWORD

In 1952 the complex problems of educational television were thrust upon the educational leadership of the United States and that of every state in the Union. Pennsylvania was not excepted. In this large and diversified State the public schools and colleges of the Philadelphia area, working with commercial stations, had successfully pioneered in using television for educational purposes. For most of the State, however, the possibilities, problems and challenges of the medium as a means of accomplishing educational objectives were in 1952 new and starting concepts.

The purpose of this report is to outline the principal developments relative to educational television in Pennsylvania for the limited period of July 1 to December 9, 1952. During this period the action program of the Joint Committee on Educational Television for Pennsylvania developed and at the end of this period, the responsibilities of the Committee were transferred to the newly organized Governor's Committee on Educational Television for this State.

This report may be found useful by other states and regions where approaches are still being made to the difficult problems of educational television. It may be helpful to those who will wish to compare the methods used in different states and to evaluate the final results. It is possible, also, that the methods and procedures used in Pennsylvania to develop educational television may be found adaptable to the solution of other similar educational problems which require extensive and concerted social action.

The initial part of the activities was undertaken and underwritten by The Pennsylvania State College. As the activities expanded rapidly, it became evident that it was neither feasible nor desirable for this Institution to continue to carry the main responsibility for the development. Consequently, every effort was made to disperse and share responsibility with other educational institutions and leadership in the State, and to find financial support for the activities.

Dr. Milton S. Eisenhower submitted a proposal to the Ford Foundation's Fund for Adult Education. Favorable action was taken on the proposal and a grant was made available through the American Council on Education for use in Pennsylvania. The grant was importantly supplemented by other resources which became available in the State. Many individuals contributed freely of their time and energies.

So many individuals have been responsible for what happened in Pennsylvania during the period under review that it would be invalid and unfair to name a few and neglect to mention others. The very core of all activities was a cooperative and mutually shared endeavor. Those who contributed most to achieving the step by step objectives were often those without direct self interest in the undertaking.

A REPORT ON EDUCATIONAL TELEVISION
ACTIVITIES IN PENNSYLVANIA

1 July 1952 - 9 December 1952

INTRODUCTION

The Television Programs Institute

The Television Programs Institute which was held at The Pennsylvania State College, April 21-24, 1952, has been systematically described by Carroll V. Newsom in A Television Policy For Education.¹ This Institute brought together from all parts of the nation educational leaders, or their representatives who were interested in the problems and possibilities of educational television. A large measure of responsibility both for formulating relevant policies and for putting them into effect would be borne by these delegates.

Among the many important decisions made by the members of this Institute, one was closely related to the development of educational television in Pennsylvania; this was that the principal responsibility for action should rest with state and local groups. It was agreed that external aid and nation-wide coordination would be required, but that regional, state and local community action would be absolutely essential for the successful development and effective use of educational television. Centralization was opposed and decentralization of operations was recommended.

When the delegates to the Institute returned to their home states and communities throughout the nation, they carried with them the clearly defined task of initiating and carrying out appropriate local programs to explore and to act on the problems of educational television.

The delegates from Pennsylvania, like those from other states, understood their responsibilities. However, many questions arose as to how to proceed. What guiding principles should be used in developing educational television in Pennsylvania? What feasible steps should be taken, and in what order? Who should take the leadership? How were all the individuals and institutions with legitimate interests in television to become involved and to make their respective contributions? How were the issues and problems to be specifically and adequately defined? How was necessary

¹ Carroll V. Newsom, A Television Policy for Education, American Council on Education, Washington, D. C., 1952

information to be collected and brought to bear on the problems to be solved? How was the public to be interested and informed? How were the sequences of interlocking and crucial decisions to be made? How were feasible plans to be drawn and executed? How were educational, governmental, and industrial agencies on both the local and state levels to be encouraged to accept and discharge their responsibilities relative to educational television?

These and many other questions arose in the thinking of delegates as they left the National Television Institute and faced the job of taking desirable actions on the regional, state and local levels.

In the background was the intrusive factor of the lack of adequate time to accomplish the many difficult tasks. The Federal Communication Commission's very limited deadline on channel reservations (June 2, 1953) loomed ominously only one short year ahead.

Developments in Pennsylvania to July 1952

The status of educational television in Pennsylvania in the spring and early summer of 1952 was ahead of the times only in Philadelphia. The public schools and universities and colleges of that city had pioneered in using television for educational purposes. With the cooperation and encouragement of the commercial stations, extensive programming was being done for the public schools. Also, more than twenty institutions of higher education and technical institutions were producing and telecasting regularly a curriculum of academic subjects. For both series of programs educators cooperated closely with commercial telecasters and used their stations' facilities.

With a view to the future, considerable thought was being given to the problem of how to secure, organize and operate channel 35 which had been reserved for Philadelphia. The Board of Education was apparently taking the initiative and had made tentative plans for licensing, constructing and operating a non-commercial TV station. Questions were being raised about how to provide for the participation of other educational, scientific and cultural organizations in the greater Philadelphia area.

The demonstrated cooperativeness of the commercial stations seemed to support the proposition that educators should channel their programs through commercial facilities and not secure their own facilities. Experience helped define, however, some of the realistic limitations to this kind of operation, especially the limitations related to program scheduling.

Pittsburgh had been assigned the valuable VHF channel 13. Plans were being made to form a broad base non-profit corporation for licensing, constructing and operating a non-commercial educational station. Explorations were being made for financial support.

Developments were limited relative to the channel 44 UHF reservation at State College. The Pennsylvania State College had explored programming possibilities and its capabilities by participating in the "University of the Air" originating in Philadelphia. Thought was being given to the questions of what should be the functions of an educational television station located in a mountainous, largely rural area with small towns, and how this station could serve unique and important functions by cooperating with both commercial and other educational stations. It was clear that The Pennsylvania State College must play a pivotal role in the development and use of a station in Central Pennsylvania as well as in the State educational television program as a whole. It seemed wise to interlock the proposed State College station with development in the State. It seemed to be desirable that the development at State College should interdepend with developments in the State.

No steps had been taken before June to form an organization or committee to work on the problems of educational television either at the College or in the central region of the State.

In Erie, the developments relative to the UHF reservation of channel 41 were in the very preliminary stages. It was reported that Gannon College was interested in applying for the license. The public schools had conducted over a commercial station a continuing "public relations" program.

Throughout the rest of Pennsylvania the issues and problems of educational television had not been brought within even the marginal focus of the attention of educators. Commercial interests were more alert. Many of them, as they planned future operations, proposed to provide time for educators as one means of complying with the public service requirements of their licenses. Generally commercial interests expressed a mild negative attitude toward non-commercial stations. However, very favorable proposals of cooperation were made by commercial interests in Philadelphia, Harrisburg and Erie. No organized opposition to educational television had developed prior to July 1952. Furthermore the leaders of commercial telecasting in Pennsylvania did not share the somewhat adverse viewpoint toward educational television often represented in the trade journals.

No active leadership had developed or become evident on the State level. The possibilities of statewide cooperative educational television had not been systematically explored conceptually nor had the desirability or feasibility of cooperation among the potential local educational stations been visualized. No analysis had been made of the full range of problems and possibilities of educational-commercial cooperation. The engineering, technical, financial, and legal problems of educational television had not been studied. In brief, except for Philadelphia and Pittsburgh the State was on dead center in June 1952 as far as thought, planning and action were concerned.

The Basic Decision

At this time, Dr. Milton Eisenhower, President of The Pennsylvania State College, encouraged and authorized several members of the College to undertake actions deemed appropriate relative to educational television in Pennsylvania. It was Dr. Eisenhower's belief that Penn State, being a land-grant public-supported institution, had special responsibilities in this connection. He insisted that attempts be made to explore fully the possibilities of cooperation between educational and commercial interests. He was understood to hold that educational television can be justified only in terms of extensive service to the people of the State, and that this would require some kind of statewide system and the close cooperation of commercial stations.

Subsequently it was decided to undertake a type of experiment or demonstration in Pennsylvania to test by application some principles of social action in the context of the responsibilities, challenges and perplexities of educational television. It was hoped that such an activity might accomplish what was acutely needed in Pennsylvania to develop educational television and also that the demonstration might provide a type of general model for other states and for similar educational endeavors.

Guiding Principles

A number of principles, which are widely known but often neglected in practical affairs, were accepted by those who planned the program for guiding the efforts of the large number of people who would cooperate in the proposed program. These statements were also to be used as criteria for evaluating lines of action and the action program as a whole.

1. The complex issues which are basic to considerations of educational television are closely related to the general welfare of all the people in Pennsylvania.

2. The valuable natural resources consisting of limited micro-wave channels belong to the people and are held in trust by those who are authorized to administer or to use them. The channels are not owned by governmental agencies, commercial interests, or by educational institutions and organizations. They are held in trust by them for use in the best interests of the people.

3. On issues as important as those of educational television, the people should be alerted, informed and adequately represented in all crucial decisions.

4. Decisions made and actions taken are only as sound as the information on which they are based.

5. Decisions should be the results of the best thoughts and sound judgments of informed representative groups and individuals with special competencies; decisions should not be arbitrarily imposed or modified by individuals, regardless of their positions, without full explanation and open debate.

6. The broadest possible participation in all activities should be persistently encouraged, fostered and actually accomplished.

7. An important public question must deal with the political forces and political institutions of the social context, but if the problem is important enough to the people, the social action should occur at a level above narrow partisan interests.

8. The special interests of groups, such as non-commercial versus commercial interests, or private versus public action, are often redefinable in terms of more general and inclusive interests, and in terms of long-time perspective. Thus, conflicts may be reduced or even eliminated.

9. Narrow special and personal interests, although they cannot be eliminated, must be properly subordinated to the general values and objectives of a social program.

10. When viewed from the perspective of all the people of the State, conflicts between local communities and the whole State are subject to redefinition and the reduction of the intensities of the conflicts whether they be real or presumed.

11. Successful social action programs require the support and assistance of individuals in responsible positions who have high general and specific prestige as well as commensurate authority.

12. Time limitations of rapidly-paced social action programs often require short cuts in group decision-making processes.

These statements formed the general guiding principles which served as a conceptual frame of reference in steering the Pennsylvania developments relative to educational television during the period July 1 through December 9, 1952. The above principles were not put to definite experimental tests. They were used merely to guide actions and to evaluate the degrees of success and failure of particular activities as the work developed.

The statements were never explained to or understood and accepted by many individuals and groups who worked on the program in Pennsylvania. This would have been desirable. Nevertheless, many decisions were made and actions taken within the frame of reference of these propositions.

Within the framework of the general guiding principles, the following objectives were formulated, and all efforts were aligned to achieve them.

1. To stimulate the responsible educational leadership of the State to become acutely aware of the challenges, opportunities and needs for action on educational television.

2. To insure that the established educational leadership of the State accept due responsibilities for deliberation and appropriate action on the problems of educational television.

3. To do everything possible to inform the general public and organized citizen groups, and to gain justifiable support for plans which are developed and approved by accredited representatives.

4. To provide a forum for the expression of opinions, and to provide favorable opportunities for the making of decisions.

5. To formulate clear and definite decisions, reflecting the consensus of opinions, which can be recommended to authorized groups, offices or agencies.

6. To terminate special action efforts and transfer responsibilities to regularly and legally established agencies or offices as soon as these objectives have been accomplished.

It was decided that a conference should be called of the interest groups in Pennsylvania. This conference would explore the situation in a preliminary way, and make plans and place responsibilities for the next steps to be taken.

The Exploratory Conference, July 7 and 8, 1952

The President's Office of The Pennsylvania State College (Mr. C. S. Wyand) extended invitations and organized the Conference largely by telephone late in June. Early and continuing contacts were made with Dr. Francis B. Haas, Superintendent of Public Instruction. The problem of selecting representatives was difficult. Although the group was limited to about 30 people, representatives were invited from the principal educational interests of the State, from the four areas (State College, Pittsburgh, Philadelphia and Erie) where reservations of channels had been made, from the State Legislature, and from the broadcasting industry. Those who accepted invitations, and actually came to the Conference, represented only a small percentage of the educational interests of the State.¹ The Exploratory Conference convened on July 7 and met for two days.

The Issues and Problems of the Exploratory Conference

The Chairman, pro tempore, (C. R. Carpenter) opened the Exploratory Conference by stating and briefly discussing the issues, problems and questions, as he saw them at that time.

The Issues

Two basic issues were raised by the Chairman to challenge the intent of the educational, governmental and commercial interests represented at the conference:

1. Would those persons who have some degree of responsibility for educational, cultural and social processes in Pennsylvania become thoroughly familiar with all of the issues involved in educational television, or would they stand passively by?

¹ See Appendix B

2. Would those who had common interests in educational and public service television plan appropriate kinds of concerted action in Pennsylvania, or would they act separately?

The Chairman suggested that if the issues were to be confronted and concerted action planned, it became a consideration of basic importance to define operationally the objectives or functions of educational and public service TV in the State.

Related Problems and Questions

The Chairman defined other basic needs and raised fundamental questions:

1. "A basic need is to appraise the technical developments in the new and rapidly expanding field of TV and to evaluate these developments relative to our broad and long term educational interests and objectives."

2. "A cluster of questions lies in what may be called the economic field. What is the value of a channel reservation? ----A related problem in the economic field is that of costs of installing and operating TV stations and networks. Is the cost absolutely prohibitive? ----It is a reasonable position to reserve decisions on costs until competent engineers and economists have supplied us with the necessary and sufficient information as a foundation for our decisions."

3. "Another major consideration which we should discuss is that of the relations of non-commercial and commercial interests. ----There is high probability that the real issues have not been clearly defined and objectively considered."

4. "----Are the resources of our educational and cultural institutions to be made more available to all the people of the State than has been true in the past?"

5. "----Are educators willing to accept the challenge of learning to use effectively the new tool - educational TV ---- which now seems almost within our reach?"

6. "How are legal requirements to be met?"

7. "What means are to be found and used to inform and advise legislative groups of the needs for, requirements and possibilities of, non-commercial television?"

Following the statement of these issues and problems, the Conference heard reports on local developments in Pennsylvania. These reports included information on attempts to conduct educational programs over commercial television stations.¹

Informal reports were also given on actions taken relative to channel reservations in Philadelphia, Pittsburgh, Erie and State College. Representatives of commercial interests discussed their experiences with educational and public service programs and raised many of the practical problems already encountered in "educational" telecasting.

The Conference next attempted to define the areas of agreement. These were, in general, the following:

1. The problem merits and requires immediate and careful consideration
2. Much information, not now available, must be collected and related to the problem.
3. The problem should be approached, at least in the beginning, in terms of a statewide perspective.
4. An appropriate organization must be set up immediately, preferably in Harrisburg, to stimulate interest, provide information and prepare eventually for the necessary consideration of issues by duly elected or appointed representatives of the people.
5. Television is a promising means of channeling educational and cultural materials to very large numbers of people.
6. The use of television will be very expensive.
7. Rapid action must be taken to prepare for having the problem of educational television considered by the Pennsylvania legislature which meets in January 1953.
8. The general public must be alerted and informed.

Areas of disagreement were defined by the differing positions taken by conference members toward the following questions:

¹ See Charles A. Siepmann, Television and Education in the United States, UNESCO, Paris 1952, pp. 86-92.

1. In view of high costs and difficulties of programming, is it practical to operate educational television separately from commercial stations and networks?

2. Can educational and commercial interests find ways of working cooperatively to the mutual advantage of all parties?

3. Is it feasible to develop any kind of a statewide educational "network" service?

4. Can educational television attract and hold sufficiently large audiences to justify the costs of this medium?

5. Are educators capable of programming educational television?

6. Are commercial stations and networks doing so satisfactory a job at present that there is no need for educational television, except as such programs can be made available to and through commercial stations?

7. Should educators use resources which they have, or which may be made available to them to "buy time" from commercial stations for educational purposes?

8. Is the reservation of channels for non-commercial television a denial of commercial interests and a violation of our private enterprise system?

Other Work of the Conference

Members of the Exploratory Conference realized that they were working in an ad hoc, non-official capacity. Accordingly, it became clear that the issues and problems should be considered and acted on by authorized representatives of educational interests. A general plan was outlined to bring this about in three steps:

1. There would be formed for Pennsylvania an ad hoc committee or committees along the lines of the national Joint Committee on Educational Television.

2. A principal function of the committee would be to plan and conduct a Conference of Delegates to be held in November for deciding on important issues.

3. An attempt would be made to have existing institutions and organizations accept leadership for further developing educational television in Pennsylvania if this was the general decision of the Conference of Delegates.

The final hours of the Exploratory Conference were used for planning a Coordinating Office and Committees.

The objectives of the proposed Joint Committee on Educational Television for Pennsylvania were the following:

1. "To conduct a comprehensive exploratory study of the problems and possibilities of educational television in Pennsylvania.

2. "To alert all the people of the State, especially the educational leadership, to these problems and possibilities.

3. "To present the findings and recommendations of the Committee to a Conference of Delegates so that intelligent decisions for statewide as well as local action can be made."

A Committee on Committees of the Exploratory Conference outlined the structure of the Joint Committee on Educational Television in Pennsylvania which eventually included:¹

1. Steering Committee - Chairman, C. R. Carpenter, The Pennsylvania State College.

2. Objectives and Functions - Chairman, John Roberts, Temple University.

3. Technical and Engineering Problems - (No Chairman)

4. Finance - Chairman, Donald K. Angell, University of Pennsylvania

5. Legal and Legislative - Chairman, John M. Lumley, Department of Public Instruction.

6. Commercial and Educational Cooperation - Co-Chairmen, Roger Clipp, WFIL-TV, and James Creese, Drexel Institute of Technology.

¹ See Appendix C

The critical problem faced in setting up working committees was that of finding qualified men who were willing to serve and who could in fact find time to do the jobs required of them. This is a well known and perennial problem in social action programs. The results of the whole activity may be used to evaluate the selections that were made.

It was decided that the principal responsibility for planning, preparing for and staging the Conference of Delegates be assigned to a Coordinating Office which was to have an office in the Education Building and be assisted by personnel of the State Department of Public Instruction in Harrisburg.

Critique of the Exploratory Conference

The positive evaluations of the Conference outweigh the negative ones. On the favorable side it should be recorded that the Exploratory Conference began to bring into focus a widespread and diffuse interest in the State. It also brought together for the first time representatives of the active local communities, especially Philadelphia and Pittsburgh, and provided the beginnings of channels of communication between them as well as with the Joint Committee on Educational Television for Pennsylvania. In addition, the Conference provided the initial opportunities for exchange of ideas and redefinition of problems of commercial and educational interests. Then too, there was a broadening of perspective to include local community interests within the frame of the whole State and a recognition that coordination and leadership was needed on the State level.

The Conference was hastily called: hence, there were persons who should have been invited who could not be invited. Some who were invited could not attend. In brief, the Conference was not as ideally representative as it should have been. The discussions and arguments were carried out largely on the level of opinion rather than on a basis of fact and sound information. Many of the problems were dealt with inadequately because sufficient information was not available. Representatives came to the Conference without previous preparation, and it was impossible during the two days to provide adequate preparation for dealing with the many complex problems which were discussed.

Both a strength and a weakness of the Conference was the fluid "non-directive" way in which it was conducted. Questions and issues were raised; proposals and solutions were not presented. In defense of the manner of conducting the Conference it might be said that for individuals to become involved in an action program requires much time, that sound mature decisions cannot be forced beyond an optional rate of development, and

that generally it is best to provide opportunities for people to arrive at their own conclusions after having heard the issues stated and after time for study and thought. Among the individuals in attendance there were great differences in ability to participate effectively in discussion; hence, about six people carried the main burden of the discussions.

The atmosphere of the Conference was permissive, polite and agreeable. There was some repression of thought and feeling, and the issues were not debated vigorously. If this had occurred, resulting antagonisms might have prevented or restricted future discussions and cooperation. In general, individuals did not take definite positions on the issues during this Conference.

THE JOINT COMMITTEE ON EDUCATIONAL TELEVISION FOR PENNSYLVANIA

The Coordinating Office

The representative of the Department of Public Instruction (Mr. Ulna Goodall) invited the Conference to establish the Coordinating Office in the Audio-Visual Aids Offices in the Education Building in Harrisburg subject to the approval of the State Superintendent. The hope was expressed that the Department of Public Instruction could also provide a secretary for the Office. The invitation was accepted. It was desired to move the activity from State College to common ground and into close contact with State Government offices and educational agencies. Also, it was judged that Harrisburg would be the most convenient meeting place for the committees and possibly for the planned Conference of Delegates.

Staffing the Coordinating Office was a serious problem. Mr. Walter Kearney, Associate Director, The Pennsylvania State College Placement Service, was selected for the position of Executive Secretary. Mr. Kearney knew and was well known by many public school people and key personnel in the educational field throughout the State.

It was realized at an early date that the Conference of Delegates might be crucial. Therefore, no effort was spared to plan adequately for this important meeting. An Associate Executive Secretary was needed who was well trained in planning and conducting such conferences. Miss Mary Catherine Welch had this training, and furthermore she had a background of training and experience in the field of audio-visual education. She was given a leave of absence from her position with the Department of Audio-Visual Instruction of the National Education Association to work with the Joint Committee on Educational Television for Pennsylvania until after the Conference of Delegates. It proved to be impossible for the Department of Public Instruction after many weeks of effort to provide secretarial services. Therefore, Miss Lillian Krampholz, a competent secretary, was employed by the Committee.

Activities of the Coordinating Office

The functions of the Office of the Joint Committee on Educational Television for Pennsylvania rapidly became numerous and complicated. The office coordinated the work of all committees, called meetings, prepared minutes, distributed these and other information and kept all

members generally informed on relevant developments. The Office kept the Superintendent of Public Instruction, Dr. Haas, well informed on the work and needs of committees. Conversely the Superintendent informed the members of the Joint Committee on Educational Television for Pennsylvania of the thinking, policies and procedures of the State Department of Public Instruction. Reviews and digests were made of developments on the national level and these were distributed to a limited extent. Regular reports were made to the National Joint Committee on Educational Television on the activities in Pennsylvania. The Office attempted to operate a speakers bureau. The responsibility for meeting speaking engagements fell largely to the Executive Secretary with some help from other members of the various committees.

In brief, the activities of the Coordinating Office became that of working with committees and with responsible offices in the State Government, collecting and distributing information, and finally planning and managing the Conference of Delegates.

The Work of Committees and Their Reports

The attempt had been made to set up working committees in the major problems areas of: (1) defining the objectives and functions of educational TV in Pennsylvania, (2) studying the technical requirements and especially the involved engineering problems, (3) making an analysis of the financial requirements and sources of funds, (4) studying and advising on the legal and legislative problems, and (5) planning the best possible and most practical methods for obtaining maximum cooperation between commercial and non-commercial agencies.

In spite of a sustained attempt, it proved to be impossible to form a committee on technical and engineering problems. This field has been highly professionalized and reserved to specialists. Busy engineers in academic institutions in the State successfully resisted accepting responsibility for making urgently needed studies of technical and engineering problems. This was a serious failure.

When busy men are given extra loads of committee responsibilities, it is often difficult to get work done thoroughly and with dispatch. In spite of competing demands for time and energies, however, most of the committees did accomplish eventually the preparation of reports on their assigned problems. The reports of Committees were prepared for general uses but most specifically for the Conference of Delegates at Hershey. These reports will be reviewed in the section on the Hershey Conference.

The Educational Congress

Each year the Department of Public Instruction of Pennsylvania holds an Educational Congress. During this Congress the State Superintendent and his Staff present major educational problems of the year to a large number of Pennsylvania educators.

Those who organized the 1952 Congress recognized that educational television was one of the current major problems. Accordingly the subject was given a place on the program. Commissioner Paul A. Walker, Chairman of the Federal Communications Commission was secured as the speaker on this subject. The Coordinating Office was instrumental in helping to make these arrangements.

Commissioner Walker reviewed cogent developments and effectively challenged the educators in Pennsylvania. He stressed the number and magnitude of both the problems and possibilities of educational television. He emphasized the need for foresight and imagination and for immediate action in order to secure freedom for future developments.

Because of the time at which it was given, Commissioner Walker's address was heard by not more than one quarter of the delegates to the Congress. Nevertheless, considerable enthusiasm was stimulated in those who heard the address. Copies of it were distributed to the Press. It was symptomatic of the times, perhaps, that press coverage was extremely limited and inadequate considering the inherent importance of the subject. It seemed clear, however, that some important educational leaders in the State had reacted favorably to the challenge presented in Commissioner Walker's speech.

Evaluation of the Coordinating Office

The Office's work may be reviewed and evaluated in terms of the specific objectives or functions which were formulated for it.

Fairly comprehensive studies were conducted on the problems and possibilities of educational television in Pennsylvania. The work of the Objectives and Functions Committee under the Chairmanship of John Roberts was very comprehensive and thorough, short of making actual field surveys. Likewise, the Legal and Legislative Committee with John Lumley as Chairman clearly defined problems and necessary actions. The achievements of

the Committee on Commercial-Educational Cooperation under Roger Clipp moved slowly, partly by intent and partly as a result of the complexity and delicacy of the issues. The Finance Committee with Donald K. Angell as Chairman was handicapped by not having available a basic blue print in terms of which cost estimates could be made.¹ The lack of a report on technical and engineering problems seriously affected the work of other committees and especially the over all statewide planning effort.

The most serious defect in the work of the Coordinating Office was related to the objective of alerting all the people of the State to the problems and possibilities of educational television.

The Speakers Bureau provided a limited number of speakers who addressed most educational meetings which were held during September, October and early November. Regardless of limitations in number of speakers it can fairly be said that the majority of the educational leadership in the State was alerted and superficially informed of the problems and issues.

On the other hand the people and organized citizen groups were seriously neglected, partly because many civic groups did not meet during the fall months. No effective publicity releases or informative materials were distributed through the newspapers. Radio and television were never used.

The lack of use and emphasis on "publicity" was in part the result of a decision by the Steering Committee to withhold news releases until the Conference of Delegates was held. It was argued by experienced members of the committee that general "publicity" might stimulate more opposition than favorable support for educational television. The lack of direct and adequate information to the committee members and educators was due directly to the secretarial understaffing of the Coordinating Office. It was not possible with the help available to prepare releases, and it was difficult to provide for adequate distribution of information even to all members of the several committees of JCET-Pennsylvania.

In brief, it is a fair estimate that the alerting and informing of the people of the State, excluding educational leaders, was not accomplished. The delicate problem of the ethics and tactics of publicity management in a democratic social action program remains to be solved.

¹ See "Report on Technical Methods for Providing Educational Television Service to the Commonwealth of Pennsylvania," Appendix A , prepared in the Spring of 1953 for the Department of Public Instruction.

The third objective of planning and conducting the Conference of Delegates was very successfully accomplished by the Coordinating Office as will become evident in the next section of this report.

Timing of Critical Events

In social action programs when an occurrence is scheduled is often of equal importance with what is done. It is frequently most difficult to time planned events for maximum effect within the context of conflicting demands and within limited periods. An example of this problem emerged during October.

One of the goals of the Joint Committee was eventually to have established an authorized and financed agency in the State to carry forward all activities relative to educational television on the State level. The accomplishment of this goal was deliberately delayed until the Hershey Conference.

From the viewpoint of the JCETP this delay seemed desirable. On the other hand the delay meant the loss of valuable time in initiating full and effective action. Furthermore, it may have been very important to have the designated members of an official group present at the Conference of Delegates.

The question remains unanswered, therefore, as to whether or not the JCET-Pennsylvania took the best position in delaying action on urging that an official group be appointed and organized prior to the Hershey Conference.

The Role of the Joint Committee on Educational Television and The American Council on Education

The national Joint Committee on Educational Television whose name was copied by agreement and applied in Pennsylvania advised and assisted the Committee in Pennsylvania at many crucial times. It provided a dependable source of sound advice and perspective. Important booklets and information in other forms were supplied to the Coordinating Office for distribution. Qualified consultants were provided for a day's conference with the Legal and Legislative Committee. On other occasions important data were made available. Representatives of the JCET-Washington - and of the American Council on Education attended the Conference of Delegates, participated in the program and generally supported that activity.

Finally, the American Council on Education received the Ford Foundation grant and disbursed it to The Pennsylvania State College for use by the JCET-Pennsylvania.

THE CONFERENCE OF DELEGATES OR THE HERSHEY CONFERENCE

The efforts of JCET-Pennsylvania from July had been oriented principally toward the Conference of Delegates. The purpose of this Conference was to bring together a large group of representatives from educational institutions, citizen's groups, State Government offices including the Legislature, and business and industry. It was planned that the representatives to this Conference would be thoroughly informed, as fast as available information and skills permitted, and that every possible opportunity would be given them for carefully considering all basic issues and problems. Thorough and extensive discussion of all issues was to be encouraged. No specific positions were to be taken or expected prior to the formulation of the consensuses of the Conference. In brief, the Conference was to be planned and conducted in such a manner as to provide favorable conditions for all representatives to understand thoroughly the issues of educational television in Pennsylvania and then to formulate the soundest possible decisions and recommendations on the future course of actions. At no time were there plans to make the Hershey Conference a "pressure operation."

It may be important to recall that the entire activity under review took place during a presidential election year and within the context of electioneering excitement which was distracting from, if not competing with, the program. Great care was taken to avoid involvement in party politics. The activity, to the greatest possible extent, was conducted at a level of common interest to all parties. So far as the facts are known, educational television did not become a political issue although this might easily have happened in the climate of opinion prevailing in Pennsylvania during the fall of 1952.

The Program of the Hershey Conference

The Conference program was planned around the following major elements or requirements:

1. Defining issues and problems.
2. Providing information.
3. Reporting on developments in the nation, in a neighboring state (New Jersey), and in Pennsylvania.

4. Presenting the opinions and viewpoints of educators with prestige.
5. Demonstrating recent television equipment and practicability of operations.
6. Arranging panel discussions.
7. Providing for free informal discussions
8. Presenting Governor John Fine as a political authority in the State.
9. Presenting Superintendent Francis B. Haas as an educational authority.
10. Providing means for formulating and expressing the consensus of the Conference.

Program of the Hershey Conference, held at Hershey, Pennsylvania

Wednesday, November 19, 1952

Registration - 9:00-9:45 A.M. - - - - - Little Theatre

Morning Session - 9:45-12:15- - - - - Little Theatre

Presiding -

Carl E. Seifert, Deputy Superintendent,
Department of Public Instruction,
Commonwealth of Pennsylvania,
Harrisburg, Pennsylvania

Welcome -

Raymond Koch, Superintendent,
Derry Township Schools,
Hershey, Pennsylvania

Purpose of Conference -

Walter A. Kearney, Executive Secretary
Joint Committee on Educational Television for Pennsylvania
Harrisburg, Pennsylvania

Address -

Potentialities of Television - As An Educational Medium,
Alfred W. Beattie, Superintendent, Allegheny County Schools,
Pittsburgh, Pennsylvania

Demonstration - A Live Telecast

Luncheon - 12:30-2:00 P. M. -----Community Club Dining Room

Afternoon Session - 2:00-5:00 P. M. -----Little Theatre

Presiding -

Harvey E. Gayman, Executive Secretary,
Pennsylvania State Education Association,
Harrisburg, Pennsylvania

Address -

The National Picture
Paul C. Reed, Assistant Director,
Joint Committee on Educational Television
Washington, D. C.

Address -

The New Jersey Plan
William H. King, Coordinator, Audio-Visual Education,
State Department of Education
Trenton, New Jersey

Committee Reports - The Situation in Pennsylvania

Committee on Objectives and Functions -

John B. Roberts, Director,
Radio and Television,
Temple University,
Philadelphia, Pennsylvania

Committee on Commercial and Educational Cooperation -

Roger W. Clipp, General Manager,
Station WFIL,
Philadelphia, Pennsylvania

James Creese, President
Drexel Institute of Technology,
Philadelphia, Pennsylvania

Technical Problems -

E. A. Hungerford, Commercial Manager, Television Equipment,
General Precision Laboratory,
Pleasantville, New York

Finance Committee -

Donald K. Angell, Vice President,
University of Pennsylvania,
Philadelphia, Pennsylvania

Legal and Legislative Committee -

John M. Lumley, Deputy Superintendent,
Department of Public Instruction,
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania

Special Session - 5:00-6:30 P. M. -----Room 205
Preview of Kinescopes

Banquet - 6:30-9:30 P. M. -----Community Club Dining Room

Presiding -

Francis B. Haas, Superintendent,
Department of Public Instruction,
Commonwealth of Pennsylvania

Key Note Address -

Honorable John S. Fine, Governor,
Commonwealth of Pennsylvania

Demonstration - A Live Telecast

Special Session - 9:30P. M. -----Room 205
Preview of Kinescopes

Thursday, November 20, 1952

Morning Session - 9:30-11:30 A. M. -----Little Theatre

Presiding -

Willis E. Pratt, President
State Teachers College
Indiana, Pennsylvania

Panel Discussion -

How Can We Work Together:

Mary Catherine Welch (Chairman)
Associate Executive Secretary,
Joint Committee on Educational Television for Pennsylvania,
Harrisburg, Pennsylvania

Walter B. Emery, Special Consultant,
Joint Committee on Educational Television,
Washington, D. C.

Martha Gable, Assistant Director,
School and Community Relations, Public Schools,
Philadelphia, Pennsylvania

John Hickey, Superintendent,
Public Schools,
Erie, Pennsylvania

E. A. Hungerford, Commercial Manager, Television Equipment,
General Precision Laboratory,
Pleasantville, New York

Harold E. Nelson, Associate Professor of Speech,
The Pennsylvania State College
State College, Pennsylvania

Carolyn Patterson, Principal, Linden School,
Pittsburgh, Pennsylvania

John B. Roberts, Director, Radio and Television,
Temple University,
Philadelphia, Pennsylvania

Address - Report of Steering Committee JCET- Pennsylvania
Preliminary Proposals for Cooperative Statewide Educational
Television in Pennsylvania

C. R. Carpenter, Chairman
Joint Committee on Educational Television for Pennsylvania
State College, Pennsylvania

Luncheon - 11:45 a.m. - 2:30 p.m. ----- Community Club Dining Room

Presiding -

C. R. Carpenter, Chairman

Joint Committee on Educational Television for Pennsylvania
State College, Pennsylvania

Action -

Recommendations, Decisions, and Next Steps

Adjournment - 2:30 p.m.

Procedures

Early in the Conference a Resolutions Committee was appointed. The membership was selected to represent estimated diversities of interests and viewpoints and not those who were known to be already in agreement. John Roberts, who had served as Chairman of the Objectives and Functions Committee, was made Chairman of the Resolutions Committee. No other members of JCET-Pennsylvania were actively associated with the Resolutions Committee.

This Committee was instructed to be, in fact, a sounding board for the Conference, to sense anew the issues and problems as understood by the Conference. The Committee was also instructed to formulate resolutions on each of the issues raised and discussed, for presentation to all the delegates at the final session. It was expected that these resolutions would be discussed, modified and accepted or rejected by the delegates meeting as a Committee of the whole.

The information core around which the Conference was conducted consisted of reports from the committees of the JCET-Pennsylvania. This was the primary use for which the reports were prepared. All other activities of the Conference were arranged to reinforce these reports and to build toward the final session when decisions were to be made. The report of the Steering Committee of JCET-Pennsylvania was intended to summarize other reports and to sketch the broad and tentative "blue print" for statewide educational television. The address of Governor Fine contributed authority, interest, and inspiration in addition to initiating important action ---- the appointment of the Governor's Committee ---- toward the next stage in the overall development.

The following section gives the important informative content of reports, and the final decisions and recommendations of the Conference of Delegates:

REPORT OF THE COMMITTEE
ON OBJECTIVES AND FUNCTIONS OF EDUCATIONAL TELEVISION

John B. Roberts, Chairman

Television is a unique medium of communication combining the advantages of sight, sound, immediacy, and easy availability. Because of its tremendous potential as a means of education and because of great relevant educational needs, the Federal Communications Commission has reserved 242 television channels to be used exclusively for educational purposes. Four of these channels were reserved for possible educational utilization in Pennsylvania until June 1953. If no application has been made for them by that date, they will be made available to commercial licensees.

Therefore, it is imperative that educators in Pennsylvania explore the possibilities of television in education without delay in order to make a wise decision and take appropriate action in regard to the use of this new development in the communications field.

To this Committee has been assigned the task of investigating and reporting on how television can be used most effectively for educational purposes. In attempting to analyze this problem, it seems necessary to explore at least three different areas: (1) Desirable educational goals which might be attained through the use of television; (2) The nature of television itself; its potentialities for achieving the aforementioned objectives; and (3) The specific applications in educational programming.

I. Desirable educational goals. The general aim of educational television should be to make available to the community a wide range of educational and cultural resources, and to provide relevant important information which will enable the individual citizen to make intelligent choices concerning social and economic issues. In providing a more specific statement of this goal, it is apparent that the audience may be considered under two categories:

A. The general audience. For this audience educational television would attempt:

1. To acquaint the viewer with the rich resources of his community.
2. To stimulate interest and effective participation in community activities.

3. To promote better understanding among community groups.
4. To create an awareness of the dignity, variety, and importance of vocational pursuits of citizens.
5. To create an interest in and a knowledge of the duties and services of government officials and employees.
6. To re-establish the home as a center for group participation in leisure time activities.
7. To assist the individual to explore his interests and aptitudes in order to select activities for the worthy use of his leisure time.
8. To broaden the horizons of the general viewer by acquainting him with the several fields of knowledge: art, literature physical and social science, philosophy, mathematics, and the like.
9. To help the viewer to keep abreast of the latest developments and movements in the social and cultural world.
10. To provide a community forum for the discussion of current events.
11. To telecast some collegiate and sports events, drama, music, and art exhibits hitherto neglected.
12. To bring outstanding personalities in all fields into the viewer's environment.
13. To promote a sincere devotion to American democracy.
14. To develop a sound understanding of the social, political, and economic relationship of the United States to the rest of the world.
15. To provide encouragement and outlet for local artistic talent.
16. To provide a means for adult education including special training, professional training, and refresher training in many fields.

B. Professional educational aims

1. To vitalize teaching by providing materials, personalities, and skills not otherwise available to the classroom.
2. To provide in-service training for teachers.
3. To develop an appreciation of the function of the school on the part of the parents and other members of the community.
4. To provide a vehicle for the presentation of new techniques of teaching, new type of administration and supervision, new methods of reporting progress and the like, to parents.
5. To provide instruction for the student who is unable to go to school.
6. To provide additional learning opportunities for the slow-learner.
7. To feature unusual projects or techniques underway in some of the schools in order to encourage other teachers and pupils to undertake similar projects.
8. To develop standards of appreciation of television programs.
9. To develop a responsibility on the part of parents for improving the television programming in the community.

II. The Nature of Television. Television, like radio, motion pictures, newspapers, and other mass communications media, has certain characteristics which should serve to guide those who would see it for educational purposes.

- A. It is a mass communications medium. It is employed most efficiently when it is used to convey worthwhile material to the greatest possible number of people. The cost of constructing and operating a television station is such that to use it for the dissemination of information to exceedingly small groups of

viewers would set the cost per student at such a prohibitive level as to suggest other means of attaining the educational objective. However, this is not to suggest that the educator should sacrifice his educational objectives merely to guarantee the maximum possible audience. The ultimate criterion for the maximum utilization of an educational channel may be considered as the presentation of programs for worthwhile educational objectives which can recruit the widest possible audience.

- B. Availability. At the present rate of growth it seems apparent that no method of mass communication, with the possible exception of radio, will be able to reach into the homes of the community with the same coverage as television.
- C. Television offers the advantages of sight plus sound. It is generally agreed by experts in the mass communications field that the combination of sight plus sound cause television to be the most effective or among the most effective of the mass communications media in conveying facts and concepts and in memory-retention values.
- D. Immediacy and Actuality. Whereas motion pictures also combine the advantages of sight and sound, only radio compares with television in securing the attention of the audience which comes from perceiving that the event is actually occurring at the very moment of reception.
- E. Possibilities for Editing. Television programs can present carefully selected and edited material by way of film and kinescopic recording when the characteristics of immediacy are not required.
- F. Television reaches a heterogenous audience. Television may be viewed by a heterogenous audience of widely diversified interests, mental abilities, and motivations. Therefore, the programs should usually have a wide appeal. Whether designed for a heterogenous general audience or for direct teaching in the classroom, television programs can be interesting, exciting, and effective.

III. The Specific Applications of Educational Programming in Television

Three distinct types of "educational" programs are possible.

- A. Programs designed for Direct Supplementary Teaching.

1. In School. Programs integrated with the curricula directly which have been presented and utilized successfully include the following types:
 - a. Mathematics at various grades
 - b. Art for all grades
 - c. Health for elementary and secondary schools
 - d. Science for elementary and secondary grades
 - e. Social studies - government, history, industry, economics, culture of a given community, state, or country
 - f. Music for elementary and secondary grades
 - g. Manners and etiquette for teen-agers
 - h. International relations, geography
 - i. Language arts and literature
 - j. Drama
 - k. Graphic arts - painting, sculpture
 - l. Dance
 - m. Physical fitness - physical education testing and corrective procedures

2. Out of School. College courses for the home viewer offered with or without credit for the extension of education of viewers both in and out of college. The following list includes but a few program types that have been offered successfully. In some cities, through station and college cooperation, an examination is taken, a fee is paid and credit is given.
 - a. Chemistry
 - b. Health
 - c. Mathematics
 - d. Drama
 - e. Architecture
 - f. Literature
 - g. Government
 - h. Foreign Languages
 - i. Current events
 - j. Physics
 - k. History

B. General Educational and Cultural Programs. Here are a few types of programs which have proved interesting and successful.

1. Dramatic presentations
2. Dance
3. Music of all types plus musical appreciation programs
4. Hobbies - jewelry making, millinery, cabinet making, interior decorating, plumbing, sports, puppetry, needle-work, cooking, upholstery, home repairs, and painting.
5. Special events programs, congressional and other governmental activities, and news events.

In the above type of programming, the community resources such as institutes, museums, colleges, state departments of education, civic, business, industrial and governmental agencies have cooperated along with private, independent educational organizations.

C. Public Relations in Education. In these, the local colleges, museums, institutes, school systems, and other educational agencies present programs to acquaint the public with what is offered:

1. Extracurricular life in school and college
2. Counseling services
3. Medical services
4. Choral and instrumental groups
5. Job placement
6. Vocational education offerings and opportunities.
7. Various courses offered such as liberal arts, sciences, home economics, and government
8. Materials, processes, and courses offered to the public by educational groups other than schools and colleges
9. Services rendered by college and school departments

SPECIAL NOTE: The Committee feels it should draw attention to the following:
Successful programming requires:

1. Trained full-time production staff
2. Facilities
3. Maintenance and operation crew for facilities
4. Adequate rehearsal time
5. Properties suitable for television (color, size, contrast)

Successful utilization requires:

1. Advance planning of programs
2. Some advance preparation for what is coming
3. Follow-up discussion, learner participation
4. Evaluation
5. Revision

REPORT OF THE FINANCE COMMITTEE
of the
JOINT COMMITTEE ON EDUCATIONAL TELEVISION FOR PENNSYLVANIA

Subsequent to the exploratory conference on Educational Television in Pennsylvania held at State College in July, there was appointed a sub-committee with the imposing title of "Committee on Educational Television Economics and Finance". The membership of this Committee is as follows:

Donald K. Angell, Chairman
Vice-President and Secretary
University of Pennsylvania
Philadelphia 4, Pa.

Mr. T. O. McCracken
Supervising Principal
Mildred Public Schools
Mildred, Pennsylvania

Dr. Paul Anderson
President
Pennsylvania College for Women
Pittsburgh, Pennsylvania

Dr. Harold Nelson
Associate Professor of Speech
The Pennsylvania State College
State College, Pennsylvania

Dr. Paul S. Christman
Superintendent of Schools
Schuylkill Haven, Pa.

Mr. P. O. Van Ness
Executive Secretary
Pa. School Directors Association
Harrisburg, Pa.

Due to the distances involved, it has not been possible for all the members of the committee to meet at any one time. It has been possible, however, for several members of the Committee to neglect concurrently their regular tasks and to give thought to the problems which dictated the wisdom of the appointment of a Finance Committee.

PROBLEM NUMBER I

What are the costs involved in setting up an educational television station? (Ultra H. F.)

Without precise specifications it is, of course, impossible to give a precise answer. Therefore, all cost estimates here given are what are believed to be minimum estimates for doing what has been loosely defined as "a reasonably good job" - (5 - 6 hour day - 40 hour week).

Technical equipment	\$ 250,000
Space	100,000
	<u>\$ 350,000</u>
Personnel costs (salaries)	130,000
Annual Miscellaneous operating costs (Including depreciation)	<u>50,000</u>
	\$ 530,000

All authorities agree that because of the many variables, there is no such thing as a "typical" television station or "average costs" for a station. We prefer to view the costs here mentioned as "indicated" costs.

PROBLEM NUMBER II

How may funds (money) be obtained to effect construction of an adequate number of stations, maintain the same, and to meet the costs of producing educational programs?

This problem it appears should be divided into at least two parts

1. A review of several sources
2. Consideration of the most likely, most logical sources

Part 1 - A Review of Many Sources - or possible combinations

1. Appropriations from the city and/or state legislatures - possibly the General State Authority for construction costs.
2. Tax Support on a per capita basis. Extensive promotion would need to be done to arouse public interest and approval to the point of regarding educational television as a public service to enrich child and adult education alike.
3. Public Solicitation
 - a. Voluntary contributions from the public interested in having the benefit of non-commercial educational TV stations.
 - b. Parent-Teacher Association solicitation.
 - c. Annual popular individual subscription on statewide basis.
4. Subscriptions from Industry and Business. The 5% tax deduction clause already covers and encourages gifts from industry to education. The tax facts should be presented to more companies, big and small, to arouse their self-interest.
5. Contributions from school districts made possible by legislation.

6. Moneys from educational institutions - who may even find that in some instances they can do the job of educating better - for less money, via TV.
7. Gifts from foundations, trusts, philanthropists, estates, and charitable persons or groups, in bulk or on an annual contribution basis.
8. Bequests
9. Tax on TV installation or sets sold in the state. Tax on any adaptation of set that might be necessary to receive educational channels.
10. School Subscriptions by appeal through all private and public schools on all levels.
11. Income from tuition for extension courses.
12. Income from sale of printed materials, correlated to listener-viewer needs.
13. Income from dollar memberships in station listing service-monthly publications.
14. Production and promotion costs, involving public service programs from industry and trade organizations.
15. Production and promotion costs of programs involving various types of non-profit organization.
16. Program productions of non-commercial nature for which agencies such as Federal Government (Bond Drives) Military (Enlistment) United Fund might be willing to pay.

Part II - Consideration of the most likely, logical sources

In the opinion of this Committee, full and able consideration of the most likely, logical sources is a matter which may best be considered by a fact-finding group authorized and encouraged by this house of delegates. This Committee views the Joint Committee on Educational Television for Pennsylvania as such a group.

PROBLEM NUMBER III

If it is the desire of those here represented that the J.C.E.T. for Pennsylvania be continued, then How is the Committee to be Financed?

At present its work is being carried on in cooperation with the Department of Public Instruction. Through the efforts of President Eisenhower of The Pennsylvania State College, with the cooperation of the American Council of Education, finances were obtained to help meet the out-of-pocket expenses to operate the J.C. E. T. for Pennsylvania and to defray the costs of this conference.

To carry on the work of the Committee between January and June the sum of \$50,000 is required (estimate).

Two sources of funds - and probably the most reasonable ones to expect - are:

1. Contributions from the organizations here represented.
2. Support from the Commonwealth. If this Conference of Delegates is disposed to favor the continuation of the J.C. E. T. for Pennsylvania or a similar committee or commission, then it is obvious that the organizations and individuals here represented must also be willing to assist in obtaining the necessary funds.

SUMMARY OF REPORT OF THE
LEGAL AND LEGISLATIVE COMMITTEE

JOHN M. LUMLEY, CHAIRMAN

The committee recommends that the following specific legislative steps are necessary in order for the people of Pennsylvania to accept the offer of F. C. C. to license four educational television channels in the Commonwealth, to construct such stations, and to operate a program of educational television for Pennsylvania:

1. That where other educational institutions do not apply for the reserved television channels, the State Department of Public Instruction do so.

2. That the General State Authority Act be amended to provide for financing the construction and equipping of educational television stations in Pennsylvania.

3. That permissive legislation be enacted so that Public School Districts of the Commonwealth may participate financially in the operation of educational television stations.

4. That through a direct appropriation to the Department of Public Instruction the Commonwealth subsidize operation costs for all educational television stations.

(These recommendations were substantially embodied in four bills which were introduced into the State Senate on April 8, 1953. See Appendix A)

REPORT TO JOINT COMMITTEE ON EDUCATIONAL TELEVISION
FOR PENNSYLVANIA

from

COMMITTEE ON COMMERCIAL-EDUCATIONAL COOPERATION

Roger W. Clipp, General Manager, WFIL, WFIL-TV and Dr. James
Creese, President, Drexel Institute of Technology - Co-chairmen

COMMITTEE MEMBERS

Mr. Alfred W. Beattie, the Honorable Fred Hare, Mr. Edward Lamb,
Mr. Harold C. Lund

for presentation at Hershey, Pennsylvania
November 19, 1952

We present first a skeleton outline of the highlights of this report.

The Committee recognizes that problems of cooperation exist at two levels:

1. Between commercial and educational stations.
2. Between commercial stations and educational institutions and educators.

Of these, the first is more difficult of solution.

Practically, whether cooperation between commercial and educational stations is possible depends upon:

1. How educational stations are financed -
 - A. By private educational institutions
 - B. By private and public institutions
 - C. By state funds
2. Long range objectives of the educational stations.

Ideally, cooperation between commercial and educational stations might embrace:

1. Mutual exchange of programs
2. Mutual exchange of knowledge and information.

With these mutual advantages to both commercial and educational stations and the public:

1. Upgrading of programs.

2. Development of new program and engineering and educational techniques.
3. Extension of coverage.

Cooperation between commercial stations and educators ideally involves:

1. Continued availability of educational resources to the stations.
2. Continued availability of time to the educators.
3. Agreement on an equative value of Nos. 1 and 2 above.

With these advantages for educators:

1. Greater audience.
2. Wider geographical coverage.

And with this advantage to the commercial stations:

1. Public service assistance.

In its studies, the Committee quickly found that the foregoing raises many problems. One of the basic problems is the determination of whether the premise of noncommercial-educational channels is compatible or competitive to commercial channels. The ultimate determination of this, it is felt by the Committee, is dependent to a large extent on the manner in which the educational stations are initially launched and the long-range objectives to which they may commit themselves.

At this writing, three possible methods of financing educational channels have come to the attention of this Committee:

1. Funds of cooperating institutions would be pooled and supplemented by grants from private foundations. No attempt would be made to utilize funds collected through tax channels.
2. Funds raised jointly by private and public educational institutions each contributing its prorata share - the share of the public institutions being obviously derived from tax sources.
3. A plan in which the State Department of Public Instruction becomes the licensee for all four educational channels and pays all operating costs even though operation of the channels may be subsequently delegated to local public and private educational institutions.

The Committee feels that the long-range objectives of the educational channels as stated in the main by the Committee on Objectives and Functions are worthwhile objectives rich in service to the public interest. If practicably executed, these functions of the educational channels would supplement the educational services presently rendered to the average community by the average commercial television station.

There is, however, the theoretical possibility that the programming of educational channels might in some instances develop to a degree which would seriously impinge at times on the total viewing audience available to the commercial telecaster. This might become particularly objectionable if the educational channels were financed by public monies.

On the other hand, the Committee realizes that the very development of this type of high program quality by the educational channels could result in two developments beneficial to the commercial broadcaster:

- A. Help raise the general program standards.
- B. The increasing of the total available viewing audience to such an extent that all stations will benefit by increased audience.

The existence of four successfully operated educational television stations in the State would have yet another benefit to the commercial industry. The existence of these stations daily influencing the lives of hundreds of thousands of our youth in their formative years would tend to impress the young citizens of our State with the power and value of the medium as a social force for good. Assuming the existence of four educational television stations, the Committee faced the problem of charting the areas of cooperation possible between those four stations and the commercial stations in the State.

Following are the areas in which cooperation might be necessary:

1. A means should be found to make the educational stations' programs available in some degree to the commercial telecaster. Film and kinescoping facilities would have to be made available for this purpose and it would be reasonable to look to the Finance Committee for recommendations on how this might be accomplished.
2. A method should be found to enable the educational stations to have the benefit of constant counsel and advice of the commercial telecaster to the end that the educational stations may be assured full access to the most proven methods of efficient operation.

3. A means might be developed to make available to the commercial telecaster certain programs from which he could derive revenue in return for the kind of cooperation extended in paragraph 2 above.
4. A means might be developed to share some of the revenues developed by paragraph number 3 above with the educational stations as rights fees, et cetera.
5. A means might be developed for rebroadcasting on educational channels certain sustaining educational programs in markets noncompetitive to the originating commercial stations.

The Committee is appending to this report an outline which suggests certain additional details which are to be considered in any overall view of commercial educational cooperation. This outline is appended for the further study of those educators and telecasters who are interested in the pursuance of this matter.

(See Appendix Attached)

APPENDIX TO
REPORT TO JOINT COMMITTEE ON EDUCATIONAL TELEVISION
FOR PENNSYLVANIA

ADVANTAGES

Commercial

1. Educators will provide some worthwhile programs. Through the colleges the commercial stations would have access to the critical judgment of college and university groups in specialized fields.
2. Use of educational stations should relieve commercial stations from burden of carrying highly specialized educational programs of limited appeal.
3. Possible additional source of revenue or reduction in expenses through:
 - (a) signature sponsorship of educational programs.
 - (b) utilization of educational personnel as producers, writers, actors, et cetera.
 - (c) possible subsidy by state to educators to purchase time in areas not covered by educational channels.
4. Generally improved understanding of educators' problems.
5. Promotional resources of schools might be available.
6. Better job of satisfying public service requirements at minimum cost.

Educator

1. Able to present educational programs in areas not now covered by channels reserved for educational stations.
2. Able to obtain air time at much lower cost than through actual station operation. This might be an important factor in low populated area where cost of educational station might not seem justified.
3. Revenue possibilities for educators through foundations, grants, et cetera, but not through signature sponsorship in the ordinary sense.
4. Better understanding of commercial broadcasters' problems.
5. Promotional and publicity resources of station might be available.
6. Possible advice and technical assistance of a professional nature.
7. Offer students additional educational opportunities for professional training.
8. Educators would benefit from the popular appeal derived from association with the programs of a commercial television station.
9. The educator would learn still more about the active use of audio-visual television aid.

LIMITATIONS AND PROBLEMS OF COOPERATION

Commercial

1. Programs will often be of uncertain entertainment value or appeal to a limited audience.
2. Educators are often less adept than professional and require longer time for rehearsals, thus increasing costs.
3. Educational programs are limited as to the type of sponsor they can accept.
4. Limited administrative control and problems of censorship.

Educator

1. Clearance of time is often difficult. Often only marginal times are available because of priority of revenue producing programs.
2. Educators are often unacquainted with television techniques.
3. Questions arise as to desirability of sponsorship and type of sponsor.
4. Problems on academic quality of programs and academic credit thereafter.

REQUIREMENTS

Commercial

1. Understanding of aims and problems of education.
2. Must be willing even at some financial sacrifice to give time when it will be "usable" for educational purposes.
3. Must be willing to give time for educational programs on some stable basis and on some priority basis.
4. They must attempt to find some common meeting ground where they can have a regular review of policy, principles, et cetera, governing techniques of television.

Educator

1. Understanding of the nature of television and television industry.
2. Must be willing to provide for talent and preparation of programs. Educators must recognize the costs of rehearsal time.
3. Educators must help in securing wide audience for maximum utilization of the programs.
4. Educators must recognize the essential difference between a television program and a classroom presentation as they must learn how to make each hour they spend in the television classroom a program rather than a typical classroom sequence.
5. They must attempt to find some common meeting ground where they can have a regular review of policy, principles, et cetera, governing techniques of television.

ADDRESS OF GOVERNOR JOHN S. FINE
AT THE
CONFERENCE OF DELEGATES ON EDUCATIONAL TELEVISION
Hershey, Pennsylvania
November 19, 1952

I extend to each of you a cordial welcome to this important conference of delegates for educational television. You, as representatives of the major educational and related interests of this State, have come together to consider the problems, issues, and opportunities of educational television for Pennsylvania. You have now to decide and advise, on the basis of careful deliberations, what should be done in this area and how these decisions shall be carried into action. This kind of democratic action relative to a complex but vitally important subject is both necessary and commendable. I wish to commend the Joint Committee on Educational Television for Pennsylvania for its alertness in recognizing the problem and its energy and resourcefulness in developing plans for educational television in the Commonwealth. I wish you full success during this conference. May you continue to progress as you work together to develop and use television for educational and cultural purposes. You shall have my complete and continuing support.

As you know, I am deeply interested in education for all of our people, the young and the old, the rich and the poor, men and women, those who are in schools and those out of schools. The legislation passed by the General Assembly and approved by me during my Administration demonstrates specifically this sincere and personal interest in our educational program.

I am delighted to have the extraordinary opportunity to participate in what appears to be another revolutionary development in education, namely, the application of television for the accomplishment of educational purposes. We welcome this challenging reimplementation of our educational facilities.

We are committed and dedicated to the ideals and principles of free men generously endowed by a Divine Providence. We are heavily responsible for applying these principles and making them work effectively. Today we are approaching a supreme test of strength of our form of government as opposed to the form of government of the Soviet Union. Democracies throughout the world are challenged by godless forces.

A necessary requirement for applying democratic principles in the management of our public affairs is to have an informed public. Necessary conditions for having an informed public are these: (1) a literate and reasonably well educated people; and (2) adequately disseminated information on issues and problems. Only then will it be possible for people to understand the issues and act with reasonable intelligence on those issues.

I am constantly amazed and disturbed by the lack of adequate information on the part of our people about crucial issues. I am often disturbed by their lack of interest and concern in important public problems.

It would seem to be clear that our schools, our informational industries, the press, radio and commercial television need to be supplemented by other means of informing the people, of activating their interests in government, and of assisting them to make a decision and take action on the numerous problems which we all must solve. I am especially concerned with the problem of continuing our adult education for the mature elements of our society. Our excellent schools and colleges merely begin the educative processes.

In a society which is undergoing such extensive and rapid changes as ours, continuing education is necessary for adjustments. People of all ages need to learn new and better ways to work, and they need to learn new and different ways to make effective adjustments to complex life situations. It seems that with the advent of television we now have for our use a medium of mass communication that will help us solve some of the educational needs I have just mentioned.

Generally speaking, as I see it, there are three great problems which we might define and all three are closely related to the deliberations of the Conference of Delegates on Educational Television.

First, there is the problem of discovering, fully developing and effectively using the human resources of our State. We must do everything possible to insure that boys and girls, men and women have those necessary opportunities for developing and using their intellectual abilities. There is no waste which is more damaging and disastrous to a state, or society, than the waste of human resources, waste of useful skills and neglect of intellectual capacities. In our complex society we urgently need all of the human resources of this State.

Second, we need to make sure that we employ effectively and efficiently the educational facilities and capabilities already available in this State. In the last biennium, this State spent over 400,000,000 dollars for education of all types. We have a capital investment in excess of 900,000,000 dollars in buildings and other educational facilities. There are in Pennsylvania nearly 9,000 public schools and over 100 colleges and universities. Approximately 85,000 people are employed in connection with our educational efforts in public schools alone. Our great communication industries, our churches, institutes and museums supplement our other professional educational activities. I am deeply concerned with the problem, as I am sure you are, of using all these educational facilities appropriately and effectively for the legitimate, necessary and desirable purposes of education.

I am convinced that the needs for training and instruction in this State exceed the present capacities of our educational facilities and institutions, even though these are operated at the highest possible levels of efficiency. However, by television, with its ability to reach thousands of citizens at once, we would be able to achieve a higher level of efficiency in training and instruction than we now know.

We have achieved notable progress in one phase of education; namely, education of the mind. But we have not been so successful in the education of man's heart and spirit. I believe that through television we can, perhaps for the first time, make real strides toward developing in man the spirit and will to live together in brotherhood and decency and the determined desire to build a peaceful world in which to live.

The third problem with which we should all be concerned is that of how to use effectively and appropriately new methods and new facilities for achieving our educational objectives, and for meeting the educational and training needs of our people.

This conference is specifically concerned with the problem of whether or not we will use television appropriately and effectively for educational purposes. The sound motion picture which Edison visualized as being of great use in education has been employed predominantly for entertainment purposes, and only secondarily for serious educational objectives. The same has been true with radio. Shall we allow history to repeat itself in the case of television? This is your problem. It is also the Commonwealth's. Furthermore, it is a question of interest and concern to every thinking citizen of Pennsylvania.

Television as a means of education is the great contemporary challenge to educators. I have heard television favorably compared to the printing press in terms of its potentialities for transmitting information. Even if this be only partially true, nevertheless, we do have great vested interests in television development and use. If television is what it now seems to be, educators and all of us would be guilty of gross neglect of public trust if we, because of indifference, preoccupation, procrastination, or ignorance, fail to take appropriate action to develop this instrument for educational and cultural purposes. We would also be judged guilty of neglect by future generations if we permit this remarkable system of communication facilities to be wasted or used in ways which are harmful to the best interest of the people.

I deem it nothing short of remarkable that educators working with the Federal Communications Commission succeeded in achieving the historic decision of that Commission of last April 14. The decision of the Commission to set aside television channels for educational use may well rank among the most important decisions made by any Federal agency, rivalling even the Land Grant College Act.

I should emphasize, however, that the decision to reserve in the Nation 242 television channels for educational and cultural uses is a permissive decision, the realization of which depends on other action. As I see it, what the Commission said in that decision as given in its 6th report was: "Here are parts of a great natural resource, a limited but very valuable natural resource, consisting of electromagnetic channels, which we hope you will take, develop and use for the general good and welfare of our society." Having said this, the Commission then set a difficult deadline on action. That deadline is June 2, 1953.

There were reserved for this great State only four channels. With these channels we can only reach 50 to 60% of the people of this State. We need, I am informed, at least three more reservations in this State. That, however, is a matter for further study and action. At present I am convinced of one thing: Pennsylvania shall not be remiss. I shall not neglect my duty. I believe the Executive Office, the State Departments, and the Legislature have the responsibility for immediate action, and I shall begin that action.

Under authority given me as Governor, I am appointing at this time a Committee to make thorough studies of all aspects of this problem, to formulate recommendations and necessary legislation, and to take such other action as is necessary to insure that the four television channels reserved for us shall be secured for Pennsylvania. Furthermore, I shall

instruct this Committee to develop an appropriate blue print of educational television for the whole State and all the people, and to prepare a schedule of implementation. I have become convinced that the dimensions of the problems and the potentialities justify this action.

An important part of the work of the Committee also will be that of planning ways and means of cooperation with commercial radio and television. Educators need the help and facilities of our great commercial telecasters. Conversely, the commercial telecasters urgently need the rich resources of our educational and cultural institutions for improving the level and quality of their programs. Fundamentally, our educational and commercial interests are not in conflict. Their interests are mutual, and each must supplement the other. We must find ways and means of developing and integrating these mutual interests.

Chairman Walker of the Federal Communications Commission at one time said that there is a fine line between deliberation and procrastination in deciding to use these educational television channels. It is my pledge that, having deliberately arrived at our conclusions as to our course of action for educational television in the Commonwealth, the June second deadline will not find us guilty of procrastination.

The action on the State level which will result from the work of the Pennsylvania Committee and the deliberations of this conference will not be sufficient to insure the success of educational television in Pennsylvania. The educational institutions and agencies in each community, working with the interested citizenry, must plan together in order that we may best use the grants allotted to us by the Federal Communications Commission. Pennsylvania will not be remiss in taking proper action to insure adequate educational television.

I, therefore, appoint the following members of the Educational Television Committee:

[The Governor here appointed 35 committee members. Additional members were appointed subsequently until, on March 5, the Committee consisted of the following:]

Mrs. M. L. Aaron, Jr., Member, Board of Public Education, Pittsburgh

Mrs. Herbert W. Anderson, President, Pennsylvania Branch of the American Association of University Women, Prospectville

Dr. Donald K. Angell, Vice President, University of Pennsylvania, Philadelphia

Dr. Alfred W. Beattie, Superintendent, Allegheny County Schools, Pittsburgh

Mrs. Donald F. Bishop, President, Pennsylvania Association of League of Women Voters, Philadelphia

Mr. Homer C. Bradley, President, Pennsylvania Joint Veterans Council, Harrisburg

Mr. James E. Butts, President, Pennsylvania Association of County Superintendents, Hollidaysburg

Mr. Robert M. Carson, President, Pennsylvania School Directors Association

Dr. Thomas E. Carson, President, Pennsylvania State Education Association

Honorable Leroy E. Chapman, Chairman of the Appropriation Committee of the Senate

Mr. Roger W. Clipp, President, Pennsylvania Association of Broadcasters, Philadelphia

Miss Rose Cologne, President, Pennsylvania Association for Adult Education, State College

Dr. G. A. Eichler, Past President, Pennsylvania Association of District School Superintendents, Northampton

Mr. Mort Farr, Past President, National Appliance and Radio TV Dealers Association, Upper Darby

Mr. Joseph Feagley, President, Pennsylvania State Chamber of Commerce, Harrisburg

Dr. R. H. Fitzgerald, Chancellor, University of Pittsburgh, Pittsburgh

Mrs. Audrey S. Graham, Past President, Pennsylvania Association of Classroom Teachers, Pittsburgh

Mrs. Alexander Groskin, President, Pennsylvania Congress of Parents and Teachers, Philadelphia

Honorable W. Stuart Helm, Chairman of the Education Committee of the House

Dr. John M. Hickey, Superintendent of Schools, Erie

Dr. Robert L. Johnson, President, Temple University, Philadelphia

Mr. Herbert P. Lauterbach, Past President, Pennsylvania State Education Association

Mr. Laurence LePage, Franklin Institute, Philadelphia

Mr. James McDevitt, President, Pennsylvania Federation of Labor, Harrisburg

Reverend Francis X. N. McGuire, President, Pennsylvania Association of Colleges and Universities

Honorable G. Mason Owlett, President, Pennsylvania Manufacturers Association, Philadelphia

Dr. Willis E. Pratt, President, State Teachers College, Indiana

Mr. P. L. Prattis, Member of the Governor's Committee on Children and Youth, The Pittsburgh Courier, Pittsburgh

Reverend Thomas J. Quigley, Superintendent of Schools, Diocese of Pittsburgh, Pittsburgh

Reverend Edward M. Reilly, Superintendent of Schools, Archdiocese of Philadelphia, Philadelphia

Mr. Walter Biddle Saul, President, Board of Public Education, Philadelphia

Honorable D. Raymond Sollenbarger, Former Chairman of the Education Committee of the House

Mr. W. T. Todd, Jr., President, Board of Public Education, Pittsburgh

Mrs. Arthur P. Vincent, President, Pennsylvania Federation of Women's Club, Slippery Rock

Honorable Paul L. Wagner, Chairman of the Education Committee of the Senate

Mrs. A. Barbara Weatherly, Director, Women's Activities with the Republican City Committee of Philadelphia, Philadelphia

Mr. Leo Weinrott, Member, Board of Public Education, Philadelphia

Honorable Norman Wood, Chairman of the Appropriation Committee of the House

Mr. C. S. Wyand, Assistant to the President, The Pennsylvania State College, State College

Dr. Francis B. Haas, Superintendent of Public Instruction, Harrisburg, Chairman

Dr. Milton S. Eisenhower, President, The Pennsylvania State College, State College, Vice Chairman

Dr. Carl E. Seifert, Deputy Superintendent of Public Instruction, Harrisburg, Acting Chairman

Mr. Walter A. Kearney, Secretary of the Committee, Room 118, Education Building, Harrisburg

PRELIMINARY REPORT OF THE STEERING COMMITTEE

JCET-PENNSYLVANIA

Delivered By

C. R. Carpenter, Chairman

For the Conference of Delegates

Hershey, Pennsylvania

November 20, 1952

I. Opening Remarks

We have reached the climax of this conference which means a climax in the activities of your ad hoc Joint Committee on Educational Television for Pennsylvania. As far as Pennsylvania is concerned, we have reached a critical period in a unique and supremely important educational development in our nation; a development which has been skilfully led by the National Joint Committee on Educational Television.

We have arrived at a point of decision as the tides of time and currents of events flow swiftly. By 3 o'clock this afternoon, you will have had the opportunity to decide on issues which will profoundly affect the educational and cultural life of Pennsylvania. This is the day of decision; tomorrow is the day of action.

II. Our Present Situation

Where are we; where do we stand? Briefly stated in broad outline, this is the situation:

The Federal Communications Commission, after extensive hearings has reserved for the nation 242 television channels to be used by educational and cultural interests. These reservations represent only about 10% of the total number of channels available; the remaining 90% will be used by commercial interests. Even so, the channels reserved for educational and cultural interests represent an estimated potential value of about one-quarter billion dollars. In one sense, the Commission has determined that a

proportion of a great natural resource has been made available in trust to the educational leadership of the country to be used in the best interest of all the people.

Reservations were allocated to Pennsylvania for four educational channels; they make up about 7% of the total allocations for this state. These channels, if applied for, and developed for use, will bring educational and cultural programs within reach of 50 to 60% of the homes in this state.

The reservations will be held until the 2nd of June 1953. Before this time, educational interests must take action which either leads to licensing or which convincingly demonstrates to the Commission a "valid intent" to use the channels, and the capability for operating them.

As you have heard during this conference, considerable progress has been made in the plans for applying for licenses in Pittsburgh and Philadelphia. Developments in Central Pennsylvania and Erie are being delayed, awaiting decisions and actions on the statewide basis.

III. The Basic Issues

A. Clearly, the primary issue is whether or not we are to have educational television in Pennsylvania. However, this issue is more complex because of two inevitable developments:

1. Commercial telecasters are required to carry a percentage of public service programs as a condition of their licenses. Furthermore, many regular commercial T.V. programs have educational and cultural values. Therefore, even if educational channels reserved for Pennsylvania are declined, or go by default, commercial stations will still provide some educational programs.

2. There is little question but that the educational channels for Pittsburgh and Philadelphia will be applied for, granted and developed. Therefore, our primary question must be restated as follows:

Shall we have cooperative, especially produced statewide educational television for all of our people or only for those within the effective range of our two great cities?

B. The second basic issue is: What shall be the character, quality and effects of educational television? Commercial programs are not planned, produced or evaluated in terms of their educational or cultural effects. They cannot be expected to provide breadth of content or to aim for generally accepted educational objectives. Nor can they be directed to limited special groups.

It seems reasonable to assume that professional educators, with their vast available and potential program resources, could favorably affect the quality of commercial telecasting, provided suitable opportunities are arranged for them to cooperate with commercial telecasters. Even parallel educational programs may be beneficial as models for many kinds of commercial programs.

An additional point is this: When television receivers become as ubiquitous as radios and telephones, the educator's responsibility and obligation to have a part in the management of this powerful influence on our people will be obvious, for already many people are concerned with this problem. By that time their opportunity for such participation may have gone: now is the time to decide and act on this issue.

C. A third basic issue is whether or not educational television will be worth the tremendous demands this medium will make in terms of money, talent, time and effort. Careful thought, without adequate experimentation however, has been given to this problem by the best brains available. Let us note that visual-auditory communications lie at the very heart of any educative process, either in or out of the classroom. It may well be that this means of transmitting auditory and visual information may some day rival the printing press in its importance to the education of our citizens in a democracy.

D. A fourth issue is, do we need a new and modern facility for education? We are aware of the fact that there are extensive unfulfilled needs for education and training, in all segments of our society, and at all levels. Why should educators be eternally bound to the use of ancient methods to accomplish modern jobs? Are we going to take advantage of technological developments which will help us to accomplish the tremendous task of educating people for an effective adjustment to our modern complex society?

IV. The Immediate Problems and Suggestions for their Solution

A. Problems

Let us assume, for the moment, that we have agreed to secure and develop to its maximum possibilities statewide educational television for Pennsylvania. What problems do we face and how may they be solved?

First, the problems will be stated in the form of questions.

1. How can educational television be financed?
2. How can the engineering and technical requirements be determined?

3. What legislative and legal actions need to be taken?
4. How is a statewide, cooperative educational system to be organized and operated?
5. Who is to be responsible for programming?
6. What are some requirements for making the best possible use of the educational programs?

B. Suggested Solutions

The following are suggested answers to these questions:

1. How can educational television be financed? First we must assume that since television is a "mass medium" which should be available to wide reaches of our population, major financing on the state level is required and justified. Highway networks cannot be feasibly financed completely by local communities; neither can we expect educational television networks to be completely financed by local communities.

Let us examine the costs for construction in the four areas where Pennsylvania already has TV channel reservations. For construction of buildings and provision of equipment it will probably cost about \$500,000 for each location, or a total of \$2,000,000 for all four channels. Equipment for greater coverage including kinescopic equipment, community systems, micro-wave links both with educational and commercial stations may cost another \$500,000. Thus, estimated construction costs, which can only be accurately determined after adequate engineering surveys, may approach three million dollars.

It is proposed that funds for the construction of educational television stations and necessary auxiliary facilities be secured through the General State Authority by appropriate legislation.

Other aspects of financing will be dealt with as other questions are discussed.

2. How can the engineering and technical requirements be determined?

First, it is necessary for an authorized body to specify to competent engineers the following:

a. Precisely where, geographically, the stations are to be located, what auxiliary facilities are needed, and where future stations may be needed.

b. What the power output of the stations should be.

c. What are to be the present and future operations and performance characteristics and requirements of the system.

This and other information must be supplied to the engineers before they can make the necessary technical surveys, map the range and reception topography, specify equipment, and supply needed recommendations and advice. Also, these questions will need to be answered for making formal applications to F.C.C.

The engineering and technical surveys must be made by competent engineering specialists employed for this purpose. It is highly desirable that these surveys be made of the whole state, both to aid our immediate planning and to serve as a basis in fact for future developments. Furthermore, it will be more economical to have a statewide survey than for each separate locality to have its own limited survey. Finally, the educational survey should be integrated with commercial services statewide.

An immediate investment of \$25,000 in a thorough, systematic statewide survey would be a sound and sensible investment. This survey is needed now. The findings will be useful both for purposes of preparing applications to the Federal Communications Commission and for the drafting of legislation.

Therefore, it is suggested that this statewide engineering survey be authorized and financed by an Executive Order of the Governor with the cooperation of the Department of Public Instruction and of local agencies.

3. What legal and legislative actions need to be taken?

a. We of JCET-Pennsylvania are advised that legislation is needed to permit public school boards and other state-supported institutions to use funds available to them for television as an educational facility. Therefore, it is necessary that a bill be introduced into the Legislature which will permit this kind of expenditure of public funds.

b. It is desirable that we have legislation which will extend the responsibility of the General State Authority to include financing the construction and equipment of educational television facilities.

c. The Governor's Joint Committee for Pennsylvania on Educational Television will need to be authorized and financed as a Commission in the Department of Public Instruction during the early weeks of the forthcoming session of the Legislature.

Educational and cultural institutions, whether state supported or not, which are not members of the local corporations shall have time made available to them for programs.

To the end that cooperation of commercial interests be secured, necessary means will be found for commercial telecasters to participate actively in all developments and to be represented at both the local and State levels.

It should be made abundantly clear that the scope of operations as now visualized with reservations in Pittsburgh, Philadelphia, State College and Erie is to be extended with all possible effort in order to reach about 90% of the people of the State, and that any proposals which are adopted will apply to all future localities when these become feasible possibilities.

It should also be understood that operations in Pennsylvania will be developed and coordinated with operations in adjacent states. It is to be expected that national developments like the T.V. Educational Exchange will afford rich opportunities for cooperation on the national level.

5. How is programming to be accomplished?

The goal of high quality programs which meet changing educational and cultural needs is assumed. The following are some necessary approaches to this difficult but supremely important activity:

a. Selecting and assigning of personnel should begin immediately by schools and other cooperating institutions and groups.

b. Training of personnel for educational T.V. programming should also begin at once. Three training centers should be organized and put into operation this coming summer. Training activities currently under way should be expanded.

c. A systematic survey of program resources in the State should be made. Programs for immediate availability should be planned and developed. It is unreasonable to expect educational stations to produce and telecast continuously "live" educational programs. We must depend heavily on kinescopic recordings and films. These must be used as important links between educational and commercial stations in the State, and with stations in other states.

Implementing this suggestion, T.V. workshops are scheduled to be conducted this summer in Pittsburgh, Philadelphia, and State College.

It is of fundamental importance that the problems of programming be approached experimentally and that continuous emphasis be given to research and evaluation. If research and evaluation are emphasized in Pennsylvania we may be able to make a unique contribution to programming on a national scope. In view of our lack of certain knowledge as to how we may best use educational television for our purposes, we must establish and maintain a strong continuing program of research.

6. What are the requirements for utilizing effectively the educational television program?

This area is equally as important as that of production. First, of course, we must have the television receivers abundantly available where they are needed. Fortunately millions of families are purchasing sets, and this will continue. However, it is possible that provisions should be made to supply television sets to schools and institutions. This problem should be attacked in cooperation with equipment manufacturers and local educators.

Much work needs to be done, also, in training both parents and teachers, adult groups, etc. how to use educational programs in order to derive maximum benefit from them.

We must also define the requirements for building and maintaining audiences. Interest in and enthusiastic support for educational programs will at first probably be of a low order. Although educational television will never compete for the main mass audience, nevertheless appropriate audiences must be attracted and held. The audiences for educational T.V. cannot be taken for granted. They must be gained and maintained by intrinsically interesting high quality programs and by appropriate promotion.

V. Summary Outline of Tentative Plan

A. First, we should begin with the Governor's Committee on Educational Television which should be authorized as a Commission. The immediate functions of this Committee should be:

1. To plan, recommend and develop an adequate and appropriate system of statewide educational television for Pennsylvania.
2. To collect all necessary information by various means including engineering surveys, use of consultants, study of proposals for

other states and analyses of the need for and proposed uses of educational television in this state.

3. To plan, write and recommend necessary and desirable legislation.

4. To work closely with state departments, especially the Department of Public Instruction, and with all local agencies.

5. To cooperate with the National JCET of the American Council on Education.

6. To keep the Federal Communications Commission fully informed of developments and prospects.

7. To assist in planning and staffing a Division of Educational Television in the Department of Public Instruction.

B. An Office of the reorganized Governor's Committee on Educational T.V., with a skeleton staff, should be set up immediately in Harrisburg in the Department of Public Instruction to continue and expand the activities of your Ad Hoc Joint Committee on Educational Television for Pennsylvania. The staff of this office should include:

1. A professional educator who is well informed on the problems and possibilities of educational television and who is capable of providing relevant information and of stimulating interest and cooperation throughout the state.

2. A competent technical man who knows equipment and engineering problems and who can advise and consult with local agencies as well as supervise technical surveys and studies.

3. An executive secretary.

This office should serve as headquarters and be the coordinating office for the Governor's Committee on Educational Television for Pennsylvania.

C. Legislation will be prepared and submitted as follows:

1. Legislation to permit the spending of public school funds for educational television.

2. Legislation to permit the General State Authority to finance construction of television stations and auxiliary facilities.

3. Legislation to authorize a Bureau of Communications, under a Deputy Superintendent, and for including a Division of Educational Television in the Department of Public Information.

4. Legislation for the appropriation of funds for technical staffs to operate stations and funds for sharing the cost of programming.

D. Licenses for the four reservations currently available will be applied for, after enabling legislation, by the Department of Public Instruction. The licenses will be leased for operating purposes to legally constituted non-profit corporations or to eligible agencies or institutions which might best serve the functions of developing and using television as an educational facility.

E. Funds which may be secured by local agencies and institutions will be used primarily:

1. To train personnel in program production.
2. To produce educational programs both "live" and filmed.
3. For research and evaluation of programs.

F. The statewide system will be coordinated and advised by competent personnel at the state level, but control and management will be the responsibilities of local agencies which hold leases, and which are assisted and advised by local representative groups.

G. The overall plan requires that the fullest possible cooperation and exchange be made possible between educational television and the commercial telecasters of this state.

H. It will be found highly advantageous to arrange for inter-state, regional and national exchange of programs and services.

In conclusion, it should be emphasized that the plan here outlined is tentative. The proposals are based on extended discussions and study by the several committees of JCET-Pennsylvania, and on suggestions made by many individuals. It is expected that the proposals will be modified. Certainly they need to be developed in detail and worked out in legal form to meet legal

requirements. Furthermore it is suggested that the application of any statewide plan may need to be modified and adapted to the requirements of local conditions and local resources. Finally, it is hoped that no specific concrete plan will be fixed and frozen until it is very clear that the design is the best that can be developed for serving all the people of Pennsylvania.

PROPOSALS

Following are the proposals which were approved and adopted by the Conference of Delegates on Educational Television for Pennsylvania held at Hershey, November 19 and 20.

1. We commend Governor John S. Fine for his forceful declaration for educational television and pledge him our support in achieving the goals he has outlined.
2. We are pleased to make available to the Governor's Committee the research reports of the investigating committees of the Joint Committee on Educational Television for Pennsylvania.
3. We recommend that the Governor's Committee consider the following resolutions adopted by this Conference of Delegates:
 - a. We recommend an immediate engineering and educational survey to assure statewide educational television service. In the survey consideration will be given to avoidance of duplication of educational facilities and services.
 - b. We recommend the creation of a division within the Department of Public Instruction to assume such responsibilities as shall be delegated to it by the Governor's Committee on Educational Television.
 - c. We recommend that the Governor's Committee give serious consideration to a plan which provides for local control in application for license and operation, the stations to operate under educational standards adopted at the state level.
 - d. We recommend the development of a system of state financial support for the construction and operation costs of the educational television stations. The amount of financial support should be based on such considerations as the wealth of the area to be served by the stations, the needs of the area to be served, the amount of program time scheduled, the initiative and interest displayed at the local level, and the degree to which the station's programs meet the educational standards devised by the State Department of Public Instruction.

- e. We recommend that the State Department of Public Instruction be charged with the task of promoting local interest in and planning for educational television service in those areas within the state which might not fall within the coverage areas of educational television stations.
 - f. We recommend that the Steering Committee of the Joint Committee on Educational Television for Pennsylvania continue to function until such time as the Governor's Committee has been established and the functions of JCET-Pennsylvania have been properly transferred thereto.
 - g. We recommend that before completing its work the JCET-Pennsylvania inform the public of the sentiments and actions of this Conference of Delegates and that each Delegate shall consider himself a committee-of-one to inform his local community and organization of the steps we have taken to further educational television in Pennsylvania.
 - h. We recommend that the Governor's Committee consider plans for continuing and furthering mutual cooperation between educators and educational stations and commercial broadcasters in Pennsylvania in appropriate recognition of the services to education already rendered by our commercial broadcasters.
- 4. We extend to Dr. Francis B. Haas our appreciation for the leadership and support that he has given this conference and the Joint Committee on Educational Television for Pennsylvania.
 - 5. We extend our appreciation to Dr. Milton Eisenhower for securing funds from the Fund for Adult Education to finance the work of the Joint Committee on Educational Television for Pennsylvania.
 - 6. We commend the Steering Committee and the Research Committees for the splendid work they have done.
 - 7. We are especially appreciative of the excellent work of Dr. C. R. Carpenter and his leadership as Chairman of the Joint Committee on Educational Television for Pennsylvania.
 - 8. We are grateful to Mr. Walter A. Kearney and Miss Mary Catherine Welch for the well organized facilities that have been provided for us here at Hershey and for their outstanding work during the past months for the Joint Committee on Educational Television for Pennsylvania.
 - 9. We extend our appreciation to Mr. Raymond H. Koch and the staff of the Derry Township Schools for their cooperation in helping to make this Conference a success.

10. We express our deep appreciation to Mr. E. A. Hungerford and his staff from the General Precision Laboratory for their generous cooperation in making possible the television demonstrations at this conference and for their counsel on technical and engineering problems.
11. We extend our appreciation to Mr. Ralph L. Hoar and his staff of the Community Building for their fine cooperation with the Joint Committee on Educational Television for Pennsylvania.
12. We are grateful to Miss Lillian Krampholz for the secretarial aid she provided.
13. We express by a standing vote our thanks to Senator Edward J. Kessler and Mr. Harry E. Seyler, member of the House, for their participation in the Conference and their interest in educational television.

CRITIQUE OF THE HERSHEY CONFERENCE

Appendix D shows that 100 organizations, institutions, agencies and offices were represented officially by 140 representatives. About 200 other organizations were invited to send representatives but failed to do so. Study of the representatives to the Conference shows that the most important and influential citizen, educational and cultural groups attended.

The intent in selecting representatives was to be inclusive rather than exclusive and to have the widest possible range of representation. Groups were invited which might under some circumstances be expected to offer some opposition to educational television. It was planned to encourage expressions of opposition at the Conference, and in open discussion to attempt to resolve any possible conflict early, rather than later when plans had been more definitely formulated and when legislative action would be in process.

The fact that opposition did not develop prior to or during the Hershey Conference was surprising to the Steering Committee of JCET-Pennsylvania. This lack of opposition resulted in speculation that perhaps covert plans were being laid for attacks on the proposals and plans. It seemed unrealistic to believe that no active and strong opposition existed. Even though this speculation was to a great extent "shadow boxing with an imaginary enemy," it served the function of keeping the JCET-Pennsylvania alert and prepared with facts, arguments and counter measures.

The Conference constituted an unchangeable deadline for committee reports, some of which were never available before that meeting. At the conference these reports were effectively presented and provided the matrix in which addresses, discussions, panels, demonstrations, and other means of informing and developing the opinions and decisions of the representatives took place. Once again the lack of an engineering and technical report put the Conference at a disadvantage. Without this information much guessing and speculation was required. However, at this stage, rough approximations to accurate facts seemed to meet requirements and expectations of the representatives.

The principal results of the Conference of Delegates are condensed and given in the resolutions and recommendations (p. 63). The remarkable fact was that every resolution or recommendation after being presented, considered, and slightly modified was passed without a single dissenting vote.¹ This result plus the appointment of the Governor's Committee on

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There was one abstention.

Educational Television for Pennsylvania were the principal intermediate objectives toward which all efforts of JCET-Pennsylvania had been directed since the first of July.

The Joint Committee on Educational Television for Pennsylvania was well pleased with its work following the Hershey Conference. It relaxed, returned home and to other work. Responsibility for educational television was left largely with the Coordinating Office, The Department of Public Instruction, and the newly appointed Governor's Committee.

The Coordinating Office completed its affairs, paid bills, issued limited reports on the Hershey Conference and assisted in scheduling the first meeting of the Governor's Committee.

A PERIOD OF TRANSITION

Although the Coordinating Office was continued until the first meeting of the Governor's Committee, in large part this was a liquidation period. The Governor's Committee was not financed and only limited borrowed office and secretarial services were available. These conditions resulted in two inadequacies: First, public information or "publicity" which had been delayed until the Hershey Conference still did not materialize. The people of the State remained largely uninformed. Second, follow-up work with Conference delegates was largely neglected at a time when they might have been encouraged to do important work of alerting and informing their communities and constituencies.

There was some but limited overlapping between the JCET-Pennsylvania and the Governor's Committee. The Department of Public Instruction provided the main continuity. However, the radical differences in composition and functions of the Governor's Committee compared with JCET-Pennsylvania and the lack of financial support for several weeks resulted in a slow start for the Governor's Committee. Very important and busy men were appointed to the Committee who could not possibly take active roles in its work; hence they delegated their responsibilities. The briefing given the Governor's Committee at its first organizational meeting by members of the JCET-Pennsylvania was not well planned, prepared or presented.

Regardless of these limitations the Governor's Committee eventually employed a Secretary who had served with JCET-Pennsylvania, provided funds and employed an engineer to conduct and report the long awaited engineering and technical survey. (The required educational survey was delayed.) In addition the Committee sponsored and assisted in preparing legislation (see Appendix A).

At present (April 20, 1953) the possibilities are favorable for enabling legislation for statewide educational television in Pennsylvania. If and when legislation is passed much will remain to be accomplished before television educational services will effectively and appropriately supplement other educational facilities and provide for the people of Pennsylvania the informative, cultural and scientific programs which they need and deserve.

There is no way a knowing with confidence the degree to which the efforts of JCET-Pennsylvania have contributed to favorable developments thus far in this State. Were statewide educational television to become a reality in the future, the true role of JCET-Pennsylvania will be uncertain. The least estimate is that JCET-Pennsylvania stimulated initial actions, focused and helped to organize efforts and provided reasonably

intelligent guidance and approaches to crucial decisions. The best possible estimate is that JCET-Pennsylvania was a principal influence in bringing the State of Pennsylvania from a position of uncertainty to a position where the probabilities are favorable for securing and developing statewide educational television.

EPILOGUE

The Governor's Committee on Educational Television for Pennsylvania has accomplished much by mid-April 1953. It has prepared a report on its views, position and recommendations. An engineering and technical survey of the State has been financed and conducted. Bills have been written and submitted to the Legislature. (The report, bills and survey follow in Appendix A.)

Dependable predictions cannot be made for the future of educational television in Pennsylvania, but most informed people are hopeful; some are pessimistic.

Two principal issues remain unresolved:

1. Means have not yet been formed for adequately financing educational television.
2. Full agreements have not been worked out and accepted on the question of degrees and methods of control at the State and local levels.

APPENDIX A

- I. Needs and Potential Uses for Educational Television in Pennsylvania
- II. Report on Technical Methods for Providing Educational Television Service to the Commonwealth of Pennsylvania
- III. Copies of Four Bills Introduced into the State Senate, April 8, 1953

APPENDIX A

I

Commonwealth of Pennsylvania

Department of Public Instruction

NEEDS AND POTENTIAL USES FOR
EDUCATIONAL TELEVISION IN PENNSYLVANIA

Prepared By

The Governor's Committee on Educational Television for Pennsylvania

April 9, 1953

EDUCATIONAL TELEVISION

If educational television implies programs service devoted exclusively to the schools and colleges, or if it means nothing but formal classroom programs, the expression is misleading.

Many thoughtful Americans, including people in all segments of our society, look upon educational radio and educational television as program service complements to that which is offered by commercially owned and operated broadcasting stations and networks. Television service devoted entirely or in large part to entertainment is not complete television service. Television is a mass communications medium like printing. No one would suggest that printing should be devoted entirely to advertising, comic strips, jokes, novels and other light entertainment. It is no more logical to think of television strictly as an entertainment medium.

Educational, public service television means the fulfillment of all that television's potential can offer. Therefore, educational television is not a duplication of commercial television; rather it is the complement---so to speak, the other side of the coin---of commercial television.

However, the conditions of operation which economic necessity places upon a commercial broadcaster limit rather sharply the kinds of program services he can afford to give his audience.

The so-called audience for radio or television programs is actually a composite of audiences. It is a collection of minorities characterized by great individual differences in program needs and wants. Many of these minority audiences are large in numbers---approaching a million in size---yet not large enough to warrant advertiser's sponsorship in bringing programs of service to them. Service to these significant minorities among whom are such classes as farmers, businessmen, and school children has been one of the major contributions of educational radio. Such service is also part of educational television's role.

Educational television must depend for its support upon its potential to serve the public in a manner which complements commercial television services---a service which beside that of commercial broadcasters represents the total range of public interest and necessity.

Educational broadcasters cannot justify their existence unless they provide program service which the public wants and needs and which it cannot readily get in sufficient quantity or quality from commercial stations; moreover, the educational broadcaster must provide service which is both effective and economical.

The Governor's Committee on Educational Television for Pennsylvania is convinced that Pennsylvanians, adults and children, both want and need an educational television service; that the resources of the state for providing such service are great; and that a state-wide television service can be established and operated at a surprisingly low cost to the people.

The Committee looks upon Pennsylvania's educational television needs as falling into three general categories of program service: (1) public school programs, (2) adult education programs, and (3) general public service programs.

Public School Service

In television the classroom teacher has a vital and compelling audio-visual tool which, when used to the best advantage in many course areas, results in teaching effectiveness unsurpassed by any other combination of teacher and audio-visual aid.

This year Pennsylvania's elementary public schools have a total enrollment of over 1,063,000 pupils; enrollment of the secondary public schools is greater than 580,000. In addition, approximately 385,000 pupils attend elementary or secondary private schools in Pennsylvania. This makes a total of about 2,028,000 school pupils. Pennsylvania's public school system has long been recognized as among the best in the nation, one which is set up to afford every pupil a premium education whether he lives in the city or the country. In recent years, however, the increased cost of education accompanied by a serious shortage of teachers has made many schools hard-pressed to maintain their traditional high standards. The hardships have been particularly great for schools in the smaller districts.

With the advent of educational television, a great new instrument has been placed in the hands of teachers and its benefits are as readily accessible to the small schools in rural areas as they are to the large schools in the city. Educational Television will bring to the schoolroom the skill and ingenuity of the best available instructors, the newest and most expensive laboratory and teaching devices and the unmatched effectiveness of television itself as an aid to the classroom teacher. Television and the teacher, working in close cooperation, can do an educational job for Pennsylvania exceeding the best of its traditional high quality service.

Classroom television has a very significant bonus value which indirectly but continuously contributes to the improvement of teaching. The television teacher is chosen because of her superiority as a professional teacher, her skill and ingenuity as one who can motivate the pupils and put across the lesson. Certainly the television teacher cannot ever supplant the classroom teacher; those who rashly maintain that she will, are not students of the educational process. But the television teacher's techniques can serve as a model to the class room teacher who ambitiously seeks self-improvement. The result can be that teaching effectiveness in every Pennsylvania classroom will be doubly enriched by the use of television.

There is another bonus value of television which some observers rate as high as direct television teaching. For many years leading educators have recognized radio as a medium which could bring to their pupils great public events---speeches of our leaders, activities of our government, etc. Television does not bring the event to the pupil. Rather it takes the pupil to the scene to deliver the full impact of the event as it appears to the eye-witness. Who can measure the worth of such experiences to the pupils in Pennsylvania's schools?

Adult Education

Educational television for use in the classroom describes only a third of its total utility to the people of Pennsylvania.

Last year approximately 1,000,000 Pennsylvania men and women, in addition to those enrolled in colleges and universities, participated in some form of adult education activity.

Like Americans everywhere these thousands of Pennsylvania adults are actively seeking means of self-improvement. For some, adult education means a chance to complete a high school diploma or take some specialized courses which they couldn't take in high school. For many others it means a chance to get part or all of a college education which is lacking because of its cost or the intervention of marriage and a family. To the largest proportion of this group, adult education activity is the opportunity to supplement formal education with vital, up-to-date information essential to increased success in a business, trade or on the farm. To these men and women, adult education means money in their pockets. But more than anything else it means opportunity to translate that education to youthful minds and thus enhance our teaching to the boys and girls of school ages in Pennsylvania.

These thousands of Pennsylvanians now participating in adult education activities are distinguished by their determination for self-improvement and their willingness to use their limited leisure time after a day of work for learning. Thousands of others equally in need of these after-work educational services are unable to take advantage of them because they may be had only at a great inconvenience, or perhaps because such services are not available in the community.

It is the extension of the campuses of Pennsylvania's great educational institutions to the borders of the state, to every city, village and farm home. It is ready access to their classrooms, laboratories, and libraries. Educational television can mean multiplying by thousands, the number of citizens, young and old, who can benefit from Pennsylvania's system of higher education.

To all of these Pennsylvania men, women and children, educational television holds the promise of broad, effective, economical and convenient opportunities to learn right in their own homes.

To the farmer, the promise is for accurate up-to-date information on the care and handling of his livestock, the efficient planting of his land, the profitable marketing of his animals and produce. To the unschooled, the promise is for acquaintance with educational fundamentals, with the great music, literature and art of our time. To the businessman or woman it is the chance to learn new skills and techniques which help them become of more value to their firms. To the mother it means sound advice on caring for her children's health and welfare. To the doctor, dentist and nurse, educational television can afford to offer specialized services which bring the latest developments in medicine and dentistry to him by the fastest, most complete method. There is no major occupational or adult interest group to which educational television cannot be of important service and that cannot be imparted by them to our school children.

Certainly, these adult education activities which educational television can engage in are going on now in hundreds of Pennsylvania communities and by other means of communications than television. But educational television has advantages over other methods which are indisputable.

1. Educational television is economical. Whereas, for example, it takes hundreds of agricultural extension workers to reach most of the farmers in Pennsylvania with demonstrations of farming techniques, all of the farmers can be reached by one person simultaneously with the same demonstration delivered with equal or greater effectiveness by means of television.

2. Educational television is fast. If today medical science were to announce the discovery of a new surgical technique which could save hundreds of lives tomorrow, a demonstration and explanation of this technique could be delivered to Pennsylvania physicians faster and more effectively than by any other means of communications. So vital is information on new developments in dentistry that frequently dentists throughout the nation pay a great price for a mammoth long distance conference call; thousands of dentists simultaneously listen on the telephone to the information which one or more of their distinguished colleagues has to offer. What is true of the needs for rapid service to physicians and dentists is also true for engineers, farmers, businessmen, public officials, census takers, civil defense workers, election clerks, peace officers, and dozens of other groups. Television has already been used to serve effectively and rapidly the needs of all of these groups.

3. Educational television is convenient. Leaders of the entertainment industry find the convenience of television is its greatest competitive advantage over many other forms of entertainment. Entertainment can be had by the flick of a switch without "dressing up", hiring a baby sitter, driving a car for miles, searching for a parking place, or, for that matter, even getting out of one's favorite easy chair. Moreover, there is no ticket of admission to purchase for a "reserved seat", the best in the house.

The convenience of educational service by television is the same as for entertainment service. Thousands of Pennsylvania men and women who are unable to enroll in night school, or drive miles to attend a class or short course, or to pay the tuition fee for special educational service, would eagerly receive the educational services of television in their own living room.

General Public Service

The third major area of program services which a statewide educational television system could bring to the people will be called general public service; this is distinguished from the other two major services described above by its lack of formality as a direct teaching program.

For many years Pennsylvania parents as well as those in all parts of the nation have felt a deep concern for the kind of materials their children read or listen to on the radio or see at the movies. PTA's, community radio councils, and others have raised stern objections to some of these materials. Certainly every parent has many times unwillingly observed his children avidly consuming reading or radio program materials which he felt were unfit for them.

With the advent of television a new factor has been added to the parent's problem. Sound psychological research has proved television's impact on children is greater than that of any of the other media of communication. In fact, one prominent child welfare specialist has asserted television for many children has already replaced the school, the church, or even the home as the primary influence in their lives.

Steps must be taken to make sure television's impact on Pennsylvania children is constructive, that it does not impair their healthy intellectual emotional and moral development. Such assurance would be part of educational television's role in Pennsylvania.

Because of its unusual importance, educational television's service to children has been given special attention. However, of equally high value are a host of other general service programs it could bring to the people of Pennsylvania.

Just as the vast resources of Pennsylvania's system of higher education can be extended throughout the state via television, so also can television expand the public service potential of the State Government and its many agencies such as the Departments of Health, Commerce, Agriculture, Highways, Labor and Industry, Public Instruction, and many others. Educational television can bring the government closer to the people and the people closer to its government than ever before.

A statewide system of educational television can also make every living room easy chair a reserved seat in the concert hall and the theatre; it can take the viewer to the scientist's laboratory or through the art gallery; it can transport him anywhere the camera can go from the tiny universe beneath the microscope to the four corners of the world. And it can teach him the things he and his children should know.

APPENDIX A
II

REPORT ON TECHNICAL METHODS FOR PROVIDING
EDUCATIONAL TELEVISION SERVICE TO THE
COMMONWEALTH OF PENNSYLVANIA

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REPORT PREPARED AT THE REQUEST OF THE
DEPARTMENT OF PUBLIC INSTRUCTION

By

HENRY E. RHEA

March 26, 1953

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REPORT ON TECHNICAL METHODS FOR PROVIDING EDUCATIONAL TELEVISION SERVICE TO THE COMMONWEALTH OF PENNSYLVANIA

I. INTRODUCTION

In its Sixth Report and Order, issued several months ago, the Federal Communications Commission provided for the assignment of a total of 82 frequency channels to television broadcast service. Channels 2 through 6 occupy that part of the frequency spectrum between 54 and 88 megacycles. Channels 7 through 13 lie within the 174 to 216 megacycle band. These first 12 channels are designated as VHF channels and have been used for television broadcasting for several years.

Channels 14 through 83 are designated the UHF channels and occupy that portion of the frequency spectrum between 470 and 890 megacycles. These channels had not previously been available for television.

In assigning these frequencies to television broadcasting, the Federal Communications Commission allocated the channels geographically on a nationwide basis. The assignment table included in the report lists the specific channels reserved for each city and state.

In the allocation plan, certain reservations were made to provide for a non-commercial educational service. Over 200 such reservations were made throughout the country.

Four educational assignments were made in Pennsylvania, as follows:

Philadelphia	.....	UHF Channel 35
Pittsburgh	.....	VHF Channel 13
Erie	.....	UHF Channel 41
State College	.....	UHF Channel 44

Because of the large area of the Commonwealth of Pennsylvania, it appeared that a truly state-wide educational television service could not be provided by the four above-mentioned allocations. In order to investigate the technical aspects of the situation, this study and survey was undertaken at the request of the Department of Public Instruction of the Commonwealth.

The objectives of the survey and study, as specified by the Department of Public Instruction, are:

1. To determine how many educational television stations would be required to provide service in accordance with Federal Communications Commission standards to a major percentage of the population of the Commonwealth of Pennsylvania.
2. To determine generally the best locations for such stations with respect to coverage of maximum population.
3. To determine optimum power and antenna height for such stations.
4. To estimate construction costs.
5. To estimate operating costs.

II. FCC RULES AND STANDARDS REGARDING SERVICE AREAS

The size of the service area of a television station is a function of the power of the transmitter, the height of the transmitting antenna, the nature of the surrounding terrain, and other factors.

Almost no experience or data is available to permit accurate prediction of coverage of a UHF television station over rough terrain such as exists over much of Pennsylvania. The Federal Communications Commission, in its Sixth Report and Order, has established certain standards for television station

coverage which have been used in this study. Specifically, the Federal Communications Commission standards define two grades of service for television stations -- Grade A and Grade B. The Grade A service area is so specified that a quality acceptable to the median observer is expected to be available for at least 90 percent of the time at the best 70 percent of receiver locations at the outer limits of this area. In the case of Grade B service the figures are 90 percent of the time and 50 percent of the locations. Curves and data for plotting such service areas are included in the Federal Communications Commission's Sixth Report and Order. The higher signal strength required by the Federal Communications Commission standards to provide a Grade A service has been specified in order to overcome local noise and interference conditions that exist in built up urban areas.

Because received field intensities of television signals vary so greatly from location to location, and with time, it is expected that any prediction of service from the Federal Communications Commission curves for a specific station will deviate appreciably from the actual service. Hills and mountains will act as shields and black out certain areas. Other conditions of terrain will provide good reception in areas that lie beyond normal range. Thus, individual station service areas calculated from the Federal Communications Commission data will be somewhat inaccurate and will not all be areas of guaranteed service. They can be construed, however, as yardsticks based upon the best available data and are expected to give a fairly good service description on a large area, rather than an individual station basis. In the case of this survey and study, which indicates areas covered by several

stations, it is believed that the total area actually covered by these several stations will not be substantially less than that plotted on the maps. There will probably, however, be substantial differences between actual and predicted coverage for some of the individual proposed stations. It is likely that such discrepancies can be minimized from the standpoint of population served by proper selection of transmitting antenna sites.

III. POSSIBLE METHODS

Providing service to a relatively large area such as the Commonwealth of Pennsylvania can be accomplished in several different ways, depending upon various combinations of transmitter power, antenna gain and antenna height.

An antenna having a gain of approximately 25 times has been more or less adopted as standard for UHF television by the industry. Accordingly, all calculations of service areas in this study have been based on the use of such an antenna.

Transmitters having outputs ranging from one kilowatt to 12 kilowatts are commercially available now or will be within the near future. Fifty kilowatt transmitters will likely be available in 1955 or 1956. The effective radiated power of a television transmitting station is equal to the product of the transmitter power output and the antenna gain -- less line and filter losses. Line losses are a function of tower height, line size, type and distance from transmitter building to the base of the tower. As a rough approximation, the effective radiated power can be taken as 20 times the transmitter power in the case of a UHF television station using the antenna mentioned above.

Present Federal Communications Commission regulations permit an effective radiated power of 1000 kilowatts with an antenna height of 2000 feet above average terrain for a UHF station. This radiated power can be obtained by using a 50 kilowatt transmitter.

A radiated power of 316 kilowatts at an antenna height of 1000 feet above average terrain is the maximum permitted by the Federal Communications Commission on VHF Channel 13, the educational channel assigned to Pittsburgh. This power can be obtained by the use of a 50 kilowatt VHF transmitter and a VHF antenna having a gain of approximately eight times.

Economic factors and equipment availability must be considered in planning the best methods for accomplishing the purpose. High power transmitters are considerably more costly than a low power equipment. On the other hand, fewer stations would be required if maximum powers are used.

The following tabulation provides comparative data for various possible combinations of transmitters and antenna height required to provide Grade B service to a major portion of the Commonwealth of Pennsylvania:

<u>ERP (KW)</u>	<u>Antenna Height (feet)</u>	<u>Grade B Service Radius (miles)</u>	<u>Grade B Service Area (Sq. miles)</u>	<u>Number of Stations Required*</u>
20	500	23	1,663	27
100	500	33	3,422	13
250	500	38	4,538	10
1000	500	47	6,957	7
1000	2000	74	17,210	6**

* Includes VHF station at Pittsburgh.

** This is maximum power and height permitted by the Federal Communications Commission for UHF television broadcast service. Using these maximums, a substantial portion of the population would receive service from more than one station because of the overlap in service areas.

IV. COST FACTORS

In order to use the most economical approach to establishing the required state-wide system, it is necessary that comparative costs of the various possibilities be analyzed. In the following table are rough costs for the different type stations referred to above. These are not to be considered as estimated costs for the stations in the suggested plan (given later), but are for purposes of comparison only.

<u>RADIATED POWER & HEIGHT</u>	<u>TRANSMITTER COST *</u>	<u>ANTENNA COSTS *</u>	<u>TOWER COST *</u>	<u>MONITORING EQUIPMENT *</u>	<u>STUDIO** EQUIPMENT*</u>	<u>TRANSMITTER BUILDING *</u>	<u>TOTAL***</u>
20 KW 500'	55	15	25	18	220	15	348
100 KW 500'	88	15	25	18	220	15	381
250 KW 500'	133	21	25	18	220	15	432
1000 KW 500'	250	31	25	18	220	30	574
1000 KW 2000'	250	40	150**	18	220	30	708

* Thousands.

** Majority coverage of the Commonwealth can be accomplished by the use of 1000 kilowatt radiated power at 1000 feet above average terrain by using six stations. The use of heights up to 2000 feet would improve the quality of service, provide some increases in coverage, and provide duplicate service to a greater percentage of the population. The tower cost shown above is for a 1000 foot tower. It is expected that in several instances mountains would provide additional height up to 2000 feet. It is not contemplated that 2000' towers costing several hundred thousand dollars would be used.

*** This includes sufficient facilities to equip two studios and control rooms; four cameras, film, slide, necessary control equipment, and video recording apparatus.

**** Less studio building.

The cost figures above were obtained from one of the leading manufacturers. Other manufacturers' prices vary slightly but the ones used are adequate for the purpose of the above comparison.

On the same comparative basis, providing state-wide systems of stations in accordance with the above would result in rough costs as follows:

<u>RADIATED POWER AND HEIGHT</u>	<u>NUMBER OF STATIONS</u>	<u>TOTAL CONSTRUCTION COSTS</u>
20 KW @ 500'	27	\$9,396,000.00
100 KW @ 500'	13	4,953,000.00
250 KW @ 500'	10	4,320,000.00
1000 KW @ 500'	7	4,018,000.00
1000 KW @ 2000'	6	4,248,000.00

It is evident that from the standpoint of construction costs it is desirable to establish a system using higher powers and heights in order to accomplish the purpose with a minimum number of installations. The last three possible systems listed above represent approximately equal construction costs. There are, however, other factors which must be considered.

Regardless of the effective radiated powers of the stations, the operating staff requirements would remain approximately constant. Hence the operating cost of a higher powered station would be more than that of a lower powered station only because of increased tube and maintenance expenses, power consumption, etc. These particular expenses are a relatively small portion of the total operating costs of a television station and therefore lower operating costs will result from the use of the minimum number of stations.

Further, since it will be necessary to have additional channels allocated to the Commonwealth of Pennsylvania for educational stations, and such channels will probably be difficult to find, the number of stations employed should

be kept to a minimum.

Finally, the use of maximum powers and maximum antenna heights as employed in the six station system will result in the best coverage of the maximum population.

V. OTHER CONSIDERATIONS

A substantial percentage of the population of Pennsylvania is included in eight metropolitan areas as follows:

<u>Area</u>	<u>Population</u>
Allentown - Bethlehem - Easton	437,800
Erie	219,380
Harrisburg	292,240
Lancaster	234,700
Philadelphia (Pennsylvania only)	3,142,000
Pittsburgh	2,213,230
Reading	255,700
Wilkes-Barre - Hazelton - Scranton....	649,000

(Data obtained from Rand McNally, Pennsylvania Map, 1952 Edition.)

In the above metropolitan areas live nearly 75 percent of the people of Pennsylvania.

It is recognized that any practical state-wide system of television stations will not provide adequate service in certain areas. This is be-

cause of the terrain conditions that prevail in Pennsylvania. Mountains, hills, and in some cases, man-made structures will shield and black out certain spots. Any proposed plan should be aimed in the direction of providing optimum service to the most people. Consequently, primary consideration should be given to the metropolitan areas listed above. The system should endeavor to provide a Grade A service into those and other urban areas. Some compromise with this objective may be necessary in order to keep within practical bounds as defined by construction and operating cost factors as well as the scarcity of additional channels.

VI. STATE-WIDE COVERAGE PLAN

As previously stated, the suggested system of stations should utilize the minimum number required to provide service to the major percentage of the population. This seems particularly essential because of the anticipated difficulty in obtaining additional channels for educational service in the state. Thus it is apparent that the stations comprising the system should use the maximum permissible radiated power and antenna height, namely 1000 kilowatts at 2000 feet for the UHF stations and 316 kilowatts at 1000 feet for the VHF stations. On this basis the system would consist of six stations

The most reliable reports from manufacturing sources indicate that transmitting equipment capable of producing maximum powers will not be available for two or three years. It is fairly certain, however, that such equipment will be commercially available and therefore can and should be

considered in planning any system for the future. Furthermore, it would be logical to proceed with the establishment of a system on a gradual basis rather than to start construction immediately (after receiving Federal Communications Commission approval) of the six maximum power stations. To construct all the stations simultaneously and attempt to reach the final goal in one step would not only require a large financial outlay, but would also pose serious problems in the obtaining of qualified, competent personnel to construct and operate these stations.

Therefore the following suggested plan is based upon reaching the ultimate in coverage by degrees and the ultimate would employ maximum power equipment and maximum height antenna,* although it is recognized that this ultimate could not be reached for several years because of equipment availability.

<u>Location</u>	<u>Channel</u>	<u>Effective Radiated Power (KW)</u>	<u>Antenna Height (feet)</u>
Philadelphia	35	1000	1000
State College	44	1000	2000
Erie	41	1000	2000
York	--	1000	2000
Wilkes-Barre	--	1000	2000
Pittsburgh	13	316	1000

* Except in the case of Philadelphia. It is not expected that the CAA would permit a 2000' tower in that area; therefore, a 1000' tower is assumed as a maximum.

Figure 1 is a state map showing the location of the six stations with indicated service areas and populations in the final stage of the program after maximum powers are utilized. Such a system of stations, when established, would provide Grade A service to a net population of 9,584,000 -- 92 percent of the state total. Grade B service would theoretically be provided to a population of 10,372,000 -- nearly 100 percent of the total.

In addition, a population of approximately 2,700,000 would have Grade B service from more than one station. In actual practice, it is expected that because of unfavorable terrain conditions, Grade B service would be provided to something less than the population figure of 10,372,000 given above, and counteracting terrain conditions that are favorable would appear to increase the figure of 2,700,000 people receiving Grade B service from more than one station.

Figure 2 indicates a system of stations with service areas that might logically be constructed as an initial step in the overall program. This consists of stations in Philadelphia, Pittsburgh, Erie and State College. Using equipment of current design and existing antenna towers, or relatively low ones which are more readily available, this system would provide Grade A service to 5,566,000 people -- 53 percent of the population and Grade B service to 6,371,000 people -- 66 percent of the population.

The Philadelphia and Pittsburgh stations alone would provide Grade A service to 5,089,000 people -- 49 percent of the total, and Grade B service to 5,989,000 people -- 57 percent of the total. It might, therefore, as an alternative, be considered desirable to construct these two stations first and

build the Erie and State College stations at some later date. If this is considered, it should be kept in mind that the educational channels presently allocated to Erie and State College will be reserved by the Federal Communications Commission only until June 2, 1953, and therefore it would be necessary to take some steps to have the reservations extended.

Figure 3 indicates a logical second step in the program. This would consist of adding medium power stations in Wilkes-Barre and York. This system would provide Grade A service to 7,080,000 people -- 68 percent of the total, and Grade B service to 8,987,000 people -- 86 percent of the total.

VII. CONSTRUCTION COSTS

Construction costs will not be the same for the six stations because of different local conditions. Higher towers will be required in some instances than in others. Some of the stations will have existing space available for studios. In other, construction from the ground up will be required. Program schedules and operations will differ; this, in turn, will vary the requirements for technical equipment.

In preparing estimates on construction costs, efforts were made to obtain as much information as possible concerning types of programs planned. Inasmuch as final program plans have not, in many instances, been formulated, it was necessary to make certain assumptions concerning equipment requirements. In general, these assumptions are based on requirements of a non-network commercial station, operating both live and film programs.

Where existing space appears to be available, building modifications costs were estimated. In other cases, costs of complete new construction were estimated. No land costs were included; it is assumed that construction would be on land owned by the state or the educational group concerned with the project.

Outlined in the following are the estimated construction costs for the suggested three step project:

STEP ONE:

As previously stated, this step contemplates the construction of four stations:

Philadelphia	250 KW ERP @ 500'
Pittsburgh	60 KW ERP @ 820'
State College	250 KW ERP @ 1000'
Erie	250 KW ERP @ 1000'

PHILADELPHIA CONSTRUCTION COSTS

Transmitting Equipment	\$135,000.00
Monitoring Equipment	18,000.00
Tower	(Use existing tower)
Antenna and Line (installed)	30,000.00
Transmitter Building	14,000.00
Studio Building Modifications (existing space)	10,000.00
Studio Equipment	215,800.00
Film Camera Chain	
2 - 16 mm Projectors and Multiplexer	
2x2 Slide Projector	
3 Studio Camera Chain	
Synchronizing Generator	
Mobile Unit	
Studio Switching Equipment	
Video Monitor Equipment	
Video Amplifier Equipment	
Camera Dollies	
Audio Equipment	
Lighting Equipment	
2 Camera Set Remote Equipment	42,000.00
2 Microwave Relay Equipment	24,000.00
Video Recording Equipment	30,000.00
Test Equipment	3,000.00
Miscellaneous Equipment	2,000.00
Equipment Installation	6,000.00
Office Furnishings	5,000.00
Contingency	25,000.00
Total	<u>\$458,800.00</u>

The above includes complete facilities for making remote pick-ups.

This is considered desirable in the Philadelphia operation, but if it is decided to postpone this type of operation, approximately \$65,000.00 can be deducted from the above. Other reductions can also be made by limiting programming activities. Lacking detailed information concerning programming, sufficient equipment was included to permit fairly extensive operations.

PITTSBURGH CONSTRUCTION COSTS

According to advice from the Department of Public Instruction, the construction of the Pittsburgh station will not involve the use of state funds. Consequently, no estimate for the building of this station is included in this report. Should it be desired, an analysis will be made if information is provided concerning the operating plans for the proposed station.

STATE COLLEGE CONSTRUCTION COSTS

Transmitting Equipment	.....	\$135,000.00
Monitoring Equipment	.....	18,000.00
Tower	.....	20,000.00
Antenna and Line	.....	18,000.00
Transmitter Building	.....	14,000.00
Studio Building	.....	90,000.00
Studio Equipment	.....	122,000.00
Film Camera Chain		
2 - 16 mm Projectors and Multiplexer		
2x2 Slide Projector		
Synchronizing Generator		
Studio Switching Equipment		
Video Monitoring Equipment		
Video Amplifiers		
2 Camera Set Field Equipment		
1 Studio Camera Chain		
Camera Dollies		
Audio Equipment		
Lighting Equipment		
2 - Microwave Relay Equipment		
Video Recording Equipment	.....	30,000.00
Test Equipment	.....	3,000.00
Miscellaneous Equipment	.....	2,000.00
Equipment Installation	.....	3,000.00
Office Furnishings	.....	3,000.00
Contingency	.....	25,000.00
Total		<u>\$483,000.00</u>

The equipment included in the above provides for two direct pick-up camera chains which can be used for either studio programming or for remotes. A third camera would remain in the studios.

The studio building indicated would be 5000 square feet in size. Recent industry experience indicates that buildings of this type can be constructed for \$18.00 to \$20.00 per square foot.

As in the case of Philadelphia, the figures used above provide for perhaps more equipment than would be required initially. If necessary, some deletions could be made by limiting programming activities. Similarly, the operation could start with less studio building space.

ERIE CONSTRUCTION COSTS

Transmitting Equipment	.....	\$135,000.00
Monitoring Equipment	.....	18,000.00
Tower	.....	25,000.00
Antenna and Line	.....	21,000.00
Transmitter Building	.....	14,000.00
Studio Building	.....	90,000.00
Studio Equipment	.....	122,000.00

Film Camera Chain
 2 - 16 mm Projectors and Multiplexer
 2x2 Slide Projector
 Synchronizing Generator
 Studio Switching Equipment
 Video Monitoring Equipment
 Video Amplifiers
 2 Camera Set Field Equipment
 1 Studio Camera Chain
 Camera Dollies
 Audio Equipment
 Lighting Equipment
 2 - Microwave Relay Equipment

Video Recording Equipment	.....	\$ 30,000.00
Test Equipment	.....	3,000.00
Miscellaneous Equipment	.....	2,000.00
Equipment Installation	.....	3,000.00
Office Furnishings	.....	3,000.00
Contingency	.....	<u>25,000.00</u>
Total		<u><u>\$491,000.00</u></u>

Equipment and facilities listed above for Erie are the same as for the State College installation.

The total estimated cost for Step One in the project is \$1,432,800.00.

STEP TWO:

The second step contemplates the addition of stations having radiated power of 250 kilowatts at 1000 feet in Wilkes-Barre and York. The results of the survey indicate that such stations will be desirable in order to provide the required coverage, but at present, educational channels have not been assigned to these locations. The fact that the two locations are included in the study does not imply that the required channels would be available. That matter can only be determined by Federal Communications Commission action.

SCRANTON - WILKES-BARRE CONSTRUCTION COSTS

Transmitting Equipment	.....	\$135,000.00
Monitoring Equipment	.....	18,000.00
Tower	.....	20,000.00
Antenna and Line	.....	18,000.00
Transmitter Building	.....	14,000.00
Studio Building	.....	90,000.00
Studio Equipment	.....	122,000.00

Film Camera Chain
2 - 16 mm Projectors and Multiplexer

2x2 Slide Projector
 Synchronizing Generator
 Studio Switching Equipment
 Video Monitoring Equipment
 Video Amplifiers
 2 Camera Set Field Equipment
 1 Studio Camera Chain
 Camera Dollies
 Audio Equipment
 Lighting Equipment
 2 - Microwave Relay Equipment

Video Recording Equipment	\$ 30,000.00
Test Equipment	3,000.00
Miscellaneous Equipment	2,000.00
Equipment Installation	3,000.00
Office Furnishings	3,000.00
Contingency	<u>25,000.00</u>
Total ..	<u><u>\$483,000.00</u></u>

Equipment and facilities listed above are the same as for State College.

LANCASTER - YORK CONSTRUCTION COSTS

Transmitting Equipment	\$135,000.00
Monitoring Equipment	18,000.00
Tower	20,000.00
Antenna and Line	18,000.00
Transmitter Building	14,000.00
Studio Building	90,000.00
Studio Equipment	122,000.00

Film Camera Chain
 2 - 16 mm Projectors and Multiplexer
 2x2 Slide Projector
 Synchronizing Generator
 Studio Switching Equipment
 Video Monitoring Equipment
 Video Amplifiers
 2 Camera Set Field Equipment
 1 Studio Camera Chain
 Camera Dollies
 Audio Equipment
 Lighting Equipment
 2 - Microwave Relay Equipment

Video Recording Equipment	.....	\$ 30,000.00
Test Equipment	.....	3,000.00
Miscellaneous Equipment	.....	2,000.00
Equipment Installation	.....	3,000.00
Office Furnishings	.....	3,000.00
Contingency	.....	<u>25,000.00</u>
Total	.....	<u>\$483,000.00</u>

Equipment and facilities listed above are the same as for State College.

The total estimated cost for Step Two in the project is \$966,000.00.

STEP THREE:

The third and last step would consist of increasing the radiated power and antenna height to the maximums permitted by the Federal Communications Commission. According to plans of the manufacturers, this step might be possible in 1956.

PHILADELPHIA COSTS

Tower, erected	.....	\$ 75,000.00
Antenna and Line	.....	35,000.00
Transmitter	.....	<u>250,000.00</u>
Total	...	<u>\$360,000.00</u>

PITTSBURGH COSTS

Not Estimated.

ERIE COSTS

Tower, erected	.....	\$150,000.00
Antenna and Line	.....	40,000.00
Transmitter	.....	<u>250,000.00</u>
Total	...	<u>\$440,000.00</u>

STATE COLLEGE COSTS

Tower, erected	.....	\$150,000.00
Antenna and Line	.....	40,000.00
Transmitter	.....	<u>250,000.00</u>
Total		<u>\$440,000.00</u>

SCRANTON- WILKES-BARRE COSTS

Tower, erected	.....	\$250,000.00
Antenna and Line	.....	40,000.00
Transmitter	.....	<u>250,000.00</u>
Total		<u>\$540,000.00</u>

LANCASTER- YORK COSTS

Tower, erected	.....	\$400,000.00
Antenna and Line	.....	40,000.00
Transmitter	.....	<u>250,000.00</u>
Total		<u>\$690,000.00</u>

The total estimated cost for Step Three in the project is \$2,470,000.00.

All cost figures used in the foregoing were obtained from one of the major manufacturers of television equipment. Other manufacturers' prices vary somewhat but the differences in most cases are not substantial enough to appreciably change the overall picture.

VIII, OPERATING COSTS

The operating expenses of the individual stations, even more than the cost of construction, are dependent upon the program schedule. The duration of the program day, the type and scope of programs planned and the number of operating hours per week affect the size of the staff and the direct operating

expense of the station.

Program plans for educational television stations are generally in the nebulous stage. Designs are undeveloped and will only be formulated after long trial and error periods. This has been and is the experience of commercial television broadcasting. Commercial operating expenses vary a great deal between stations, but in general, they follow a definite pattern in proportion to type and quantity of programming.

Although there are many variables depending upon differences in local conditions at each station, best industry experience indicates that the total operating expense of a medium size station is approximately two and one-half times the payroll. It does not seem reasonable to expect that an educational television station can be staffed to any appreciable extent by personnel engaged primarily in the performance of other duties in the school, university or educational institution. Full time staffs must be assumed.

Commercial stations have certain expenses that educational stations will not have, or at least not to the same extent. For example, sales, advertising, promotion and bookkeeping expenses will not be comparable. However, talent and film costs, which, in many cases, are borne by a commercial client, will nearly always be a direct expense in the educational operation. This is also true of property, scenery, slide and other similar expenses. These factors tend to offset one another. Because of very limited experience in the operation of educational stations, it seems logical to draw a parallel with commercial operations in estimating operating expenses.

The Philadelphia and Pittsburgh operations will apparently include

the most extensive programming activities during the first year or two. According to advice from the Department of Public Instruction, Pittsburgh does not contemplate the use of state funds for construction and therefore was not specifically a part of this study. The operations planned for the station must be assumed to be similar to those planned for Philadelphia for purposes of including Pittsburgh's operational costs.

Based on a six hour program day, five days per week, these two stations could be staffed as shown below.

<u>PHILADELPHIA - PITTSBURGH STAFF</u>	<u>Number of Employees</u>
A. General and Administrative	4
Station Director	
Secretary	
Receptionist-Telephone Operator	
Janitor	
B. Engineering	8
Chief Engineer	
2 Transmitter Engineers	
3 Studio Engineers	
1 Maintenance Engineer	
1 Recording Engineer	
C. Program	17
Program Director	
2 Camera Directors	
5 Cameramen-Studio Operators	
1 Scenic Artist	
1 Carpenter-Property Man	
1 Film Director	
1 Traffic-Continuity Man	
2 Announcers	
1 Music Director	
1 Secretary	
1 Special Events	
Total	<u>29</u>
Annual Payroll -- \$130,000.00	

The other stations -- Erie, State College, York and Wilkes-Barre might reasonably be expected to operate initially on a more limited scale. Presumably, a greater percentage of their program schedules will consist of film including video recordings from the other stations. A six hour program day, however, is assumed.

These four stations may be staffed as follows:

<u>STATE COLLEGE, ERIE, LANCASTER-YORK,</u> <u>SCRANTON-WILKESBARRE</u>		<u>Number of</u> <u>Employers</u>
A. General and Administrative		4
Station Director		
Secretary		
Receptionist-Telephone Operator		
Janitor		
B. Engineering		7
Chief Engineer		
2 Transmitter and Recording Engineers		
3 Studio Engineers		
1 Maintenance Engineer		
C. Program		13
Program Director		
2 Camera Directors		
4 Cameramen-Operators		
1 Artist-Property Man		
1 Film Director		
2 Announcers		
1 Traffic-Continuity Music		
1 Secretary		
Total		<u>24</u>

Annual Payroll -- \$108,000.00

Based on the foregoing, the annual operating expenses of a station such as Philadelphia may be estimated at approximately \$325,000.00.

Estimates for annual operation of stations such as proposed for Lancaster-York, State College, Erie, and Wilksbarre-Scranton would be approximately \$270,000.00 each.

The total for the six stations--Philadelphia, Pittsburgh, Erie, State College, Lancaster-York, and Wilksbarre-Scranton--would be \$1,730,000.00 per year. When maximum powers are attained, increased maintenance and power expenses would raise this to approximately \$1,900,000.00.

As in the case of construction costs, substantial reductions in the foregoing figures could be made by limiting programming activities. The above estimates may be on the high side for the first year or two of operation. There are many variables, however, and if funds are to be appropriated, it is suggested the above figures be used, for with good management, the funds should be adequate.

S U M M A R Y

Six educational television stations, five UHF and one VHF, operating with maximum power and antenna heights permitted by the Federal Commission will provide service to a major percentage of the population of the Commonwealth of Pennsylvania. These stations could be located in Philadelphia, Pittsburgh, Erie, State College, Lancaster-York and Scranton-Wilksbarre

The building program, if undertaken, might logically proceed in three steps:

Step One -- Medium power stations in Philadelphia, Pittsburgh, State College and Erie.

Step Two -- Medium power stations in Lancaster-York and Scranton-Wilkesbarre

Step Three -- Maximum power and height in all six locations.

Subject to prompt action and approval by the Federal Communications Commission. Step One can be accomplished within 12 months, Step Two between 18 and 24 months, and Step Three in approximately 36 months.

Cost and population data for the three steps are shown in the following table:

	<u>STATIONS</u>	<u>GRADE A POPULATION</u>	<u>GRADE B POPULATION</u>	<u>CONSTRUCTION COSTS***</u>	<u>ANNUAL OPERATING COST</u>
STEP ONE:	Medium power; Philadelphia Pittsburgh State College Erie	5,566,000	6,671,000	\$1,482,800	\$1,190,000
STEP TWO:	Medium power; Philadelphia Pittsburgh State College Erie York Wilkes-Barre	7,080,000	8,937,000	966,000	1,730,000
STEP THREE:	Maximum power for all six stations	9,930,000*	13,059,000**	2,470,000	1,900,000
TOTAL CONSTRUCTION COST				<u>\$4,868,800</u>	

* Includes 350,000 receiving service from more than one station.

** Includes 2,337,000 receiving service from more than one station -- net population receiving theoretical Grade B service is 10,372,000.

*** Less Pittsburgh.

Figure 1

- Grade A Area
- Grade B Area

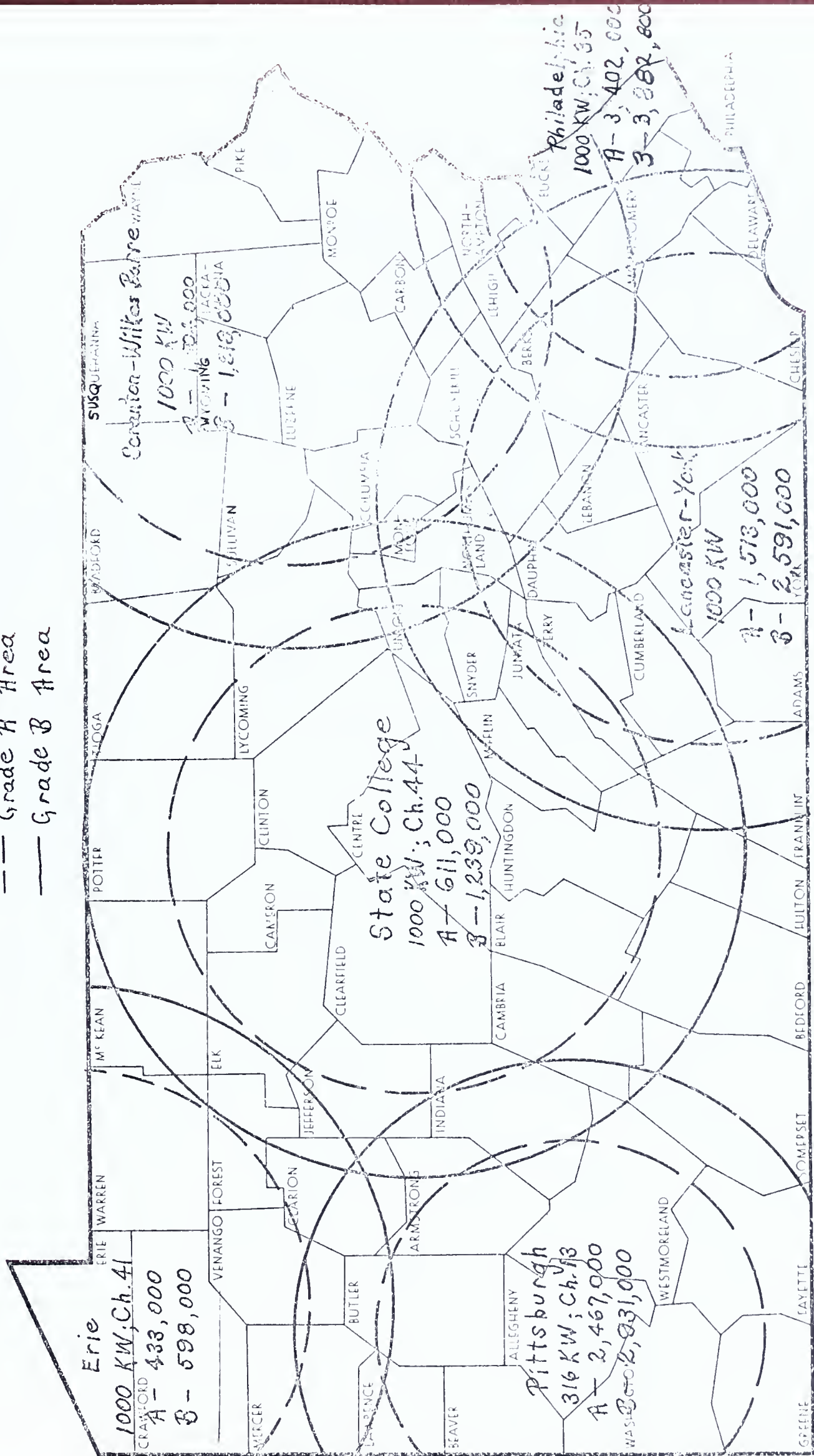
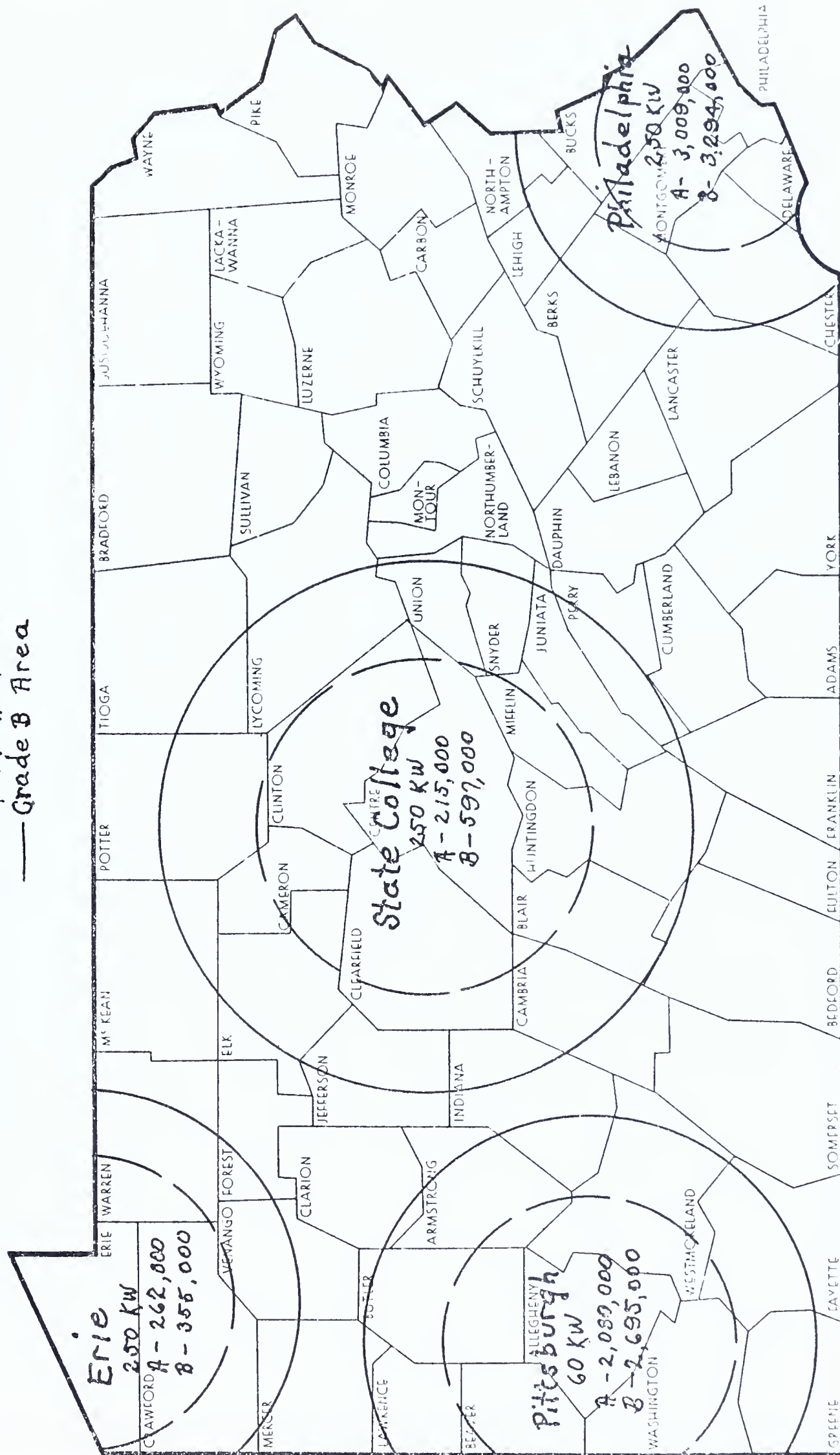


Figure 2
 --- Grade A Area
 --- Grade B Area



[illegible]

APPENDIX A

III. COPIES OF FOUR BILLS INTRODUCED INTO THE STATE SENATE
April 8, 1953

The General Assembly of Pennsylvania

SENATE BILL

No. 450 Session of 1953

Introduced by Mr. Wagner, April 8, 1953

Referred to Committee on Education, April 8, 1953

AN ACT

Relating to the establishment and operation of educational television stations
conferring powers and imposing duties upon the Department of Public
Instruction.

The General Assembly of the Commonwealth of Pennsylvania mindful
of the responsibility placed upon it by the Constitution to provide for the
maintenance and support of a thorough and efficient system of public schools
recognizes the potentialities inherent in television and realizes that education
with the aid of television will take on new dimensions bringing the outside
world to the classroom motivating and increasing the speed of every pupil's
learning rate and enriching and extending the educational experiences of
pupil and teacher.

The General Assembly of the Commonwealth of Pennsylvania hereby
enacts as follows

1 Section 1 The Department of Public Instruction is hereby au-
2 thorized and directed to apply to the Federal Communications Com-
3 mission for construction permits and licenses for educational televi-
4 sion stations in the event that other educational institutions or agencies
5 in the areas where channels are reserved fail to do so The department
6 may provide for the erection and equipment of educational television
7 stations in the areas where channels are now reserved or may become
8 available for educational television and may do so through the General
9 State Authority or any other State agency

10 Section 2 All educational television stations shall be operated in
11 compliance with the rules and regulations of the Federal Communica-
12 tions Commission and the rules which shall be promulgated by the De-
13 partment of Public Instruction to carry out the purposes of the Federal
14 act and shall provide educational recreational and cultural services for
15 the people of the Commonwealth of Pennsylvania

1 Section 3 The Department of Public Instruction shall have the
2 following duties and responsibilities

3 (1) To establish and maintain a library of programs and under
4 proper regulations make agreements for the exchange of programs
5 with other educational institutions

6 (2) To provide the necessary specialized staff consultation facilities
7 and supervision to insure the establishment and maintenance of high
8 standards of performance and compliance with Federal laws and regu-
9 lations

10 (3) To make available programs of State-wide educational interest
11 through films or kinescopes or network facilities when and if such facil-
12 ities are available

13 (4) To appoint such personnel as may be needed for the accomplish-
14 ment of the purposes of this act

15 The Department of Public Instruction shall have the following
16 duties and responsibilities with regard to educational television stations
17 of which it is the licensee

18 (a) To approve all proposed locations for the erection of educational
19 television stations

20 (b) To operate educational television stations

1 (c) To permit the operation of any of said stations by written
2 agreement with any non-profit corporation of the Commonwealth of
3 Pennsylvania formed for the purpose of operating an educational tele-
4 vision station in any area provided that the non-profit corporation meets
5 the requirements of the Federal Communications Commission and the
6 regulations of the Department of Public Instruction and such corpora-
7 tion provides for membership of representatives of school districts
8 colleges and other educational and cultural institutions in the areas
9 served

10 (d) To revoke any operational agreement entered into pursuant to
11 subsection (c) of this section in the event of any violation of any
12 such agreement

13 Section 4 Educational television stations may be constructed on
14 lands purchased by the department or on land or in buildings owned by
15 any political subdivision or agency thereof non-profit corporation college
16 or university with the consent of such political subdivision non-profit
17 college or university and sending towers may be erected or agreements
18 made for the use of existing towers if available and adequate

19 Section 5 In the event that an educational television station is
20 operated by anyone other than the Department of Public Instruction

1 the operation must be so conducted that its facilities may be available
2 to all educational and cultural agencies in the area served as provided
3 in the rules of the Federal Communications Commission and the rules
4 promulgated by the Department of Public Instruction Committees or
5 boards of directors shall be established representing the educational and
6 cultural interests of the area These committees and boards of directors
7 shall be responsible for the planning and the development of programs
8 in their respective areas and the establishment and execution of policies
9 governing such programs subject to the Federal laws and regulations
10 and the rules and regulations of the Department of Public Instruction
11 and the written agreements herein referred to

12 Section 6 If the educational television station is operated by
13 anyone other than the Department of Public Instruction the funds for
14 the operation shall be paid to the operating agency as required for
15 operational purposes but subject to the approval and under the super-
16 vision of the Department of Public Instruction and all expenditures
17 shall be audited by the department agent or the auditors of the De-
18 partment of Public Instruction

1 Section 7 The provisions of this act shall become effective imme-
2 diately upon final enactment

The General Assembly of Pennsylvania

SENATE BILL

No. 451 Session of 1953

Introduced by Mr. Wagner, April 8, 1953

Referred to Committee on Education, April 8, 1953

AN ACT

To amend the act approved the tenth day of March one thousand nine hundred forty-nine (Pamphlet Laws 30) entitled "An act relating to the public school system including certain provisions applicable as well to private and parochial schools amending revising consolidating and changing the laws relating thereto" by authorizing certain contracts relating to television

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows

Underscoring indicates new matter added to existing law.

1 Section 1 Article V of the act approved the tenth day of March
2 one thousand nine hundred forty-nine (Pamphlet Laws 30) entitled
3 "An act relating to the public school system including certain provisions
4 applicable as well to private and parochial schools amending revising
5 consolidating and changing the laws relating thereto" is hereby amended
6 by adding immediately after section five hundred twenty-one thereof
7 a new section to read as follows

8 Section 522 (a) The board of school directors of any school district
9 may enter into an agreement or agreements with one or more school
10 districts and/or with other educational institutions or agencies and/or
11 with non-profit organizations for the joint operation of an educational
12 television station

13 (b) The board of school directors of any school district may enter
14 into a contract with commercial telecasters or with non-profit organiza-
15 tions or both for television broadcasts

16 Section 2 The Provisions of this act shall become effective im-
17 mediately upon final enactment

The General Assembly of Pennsylvania

SENATE BILL

No. 452 Session of 1953

Introduced by Mr. Wagner, April 8, 1953

Referred to Committee on Education, April 8, 1953

AN ACT

To further amend section four of the act approved the thirty-first day of March one thousand nine hundred forty-nine (Pamphlet Laws 372) entitled "An act to promote the welfare of the people of the Commonwealth creating The General State Authority as a body corporate and politic with power to construct improve equip furnish and operate projects and to lease the same and to fix fees rentals and charges for the use thereof authorizing and regulating the issuance of bonds for said Authority and providing for the payment of such bonds and the rights of the holders thereof and to enter into agreements with the Government of the United States or any Federal agency and authorizing the Department of Property and Supplies to grant assign convey or lease to the Authority lands of the Commonwealth and interests therein and to acquire lands therefor granting the right of eminent domain empowering The General State Authority to sell and convey projects and property to the Commonwealth and providing that no debt of the Commonwealth shall be incurred in the exercise of any of the powers granted by this

act" by authorizing educational television stations

The General Assembly of the Commonwealth of Pennsylvania hereby
enacts as follows

1 Section 1 Section four of the act approved the thirty-first day of
2 March one thousand nine hundred forty-nine (Pamphlet Laws 372)
3 entitled "An act to promote the welfare of the people of the Common-
4 wealth creating The General State Authority as a body corporate and
5 politic with power to construct improve equip furnish and operate proj-
6 ects and to lease the same and to fix fees rentals and charges for the

1 use thereof authorizing and regulating the issuance of bonds for said
2 Authority and providing for the payment of such bonds and the rights
3 of the holders thereof and to enter into agreements with the Govern-
4 ment of the United States or any Federal agency and authorizing the
5 Department of Property and Supplies to grant assign convey or lease
6 to the Authority lands of the Commonwealth and interests therein
7 and to acquire lands therefor granting the right of eminent domain
8 empowering The General State Authority to sell and convey projects
9 and property to the Commonwealth and providing that no debt of the
10 Commonwealth shall be incurred in the exercise of any of the powers
11 granted by this act" as last amended by the act approved the fifth
12 day of January one thousand nine hundred fifty-two (1951-1952 Pam-
13 phlet Laws 1829) is hereby further amended to read as follows

14 Section 4 Purposes and Powers General The Authority is created
15 for the purpose of constructing improving equipping furnishing main-
16 taining acquiring and operating sewers sewer systems and sewerage treat-
17 ment works for State institutions of every kind and character (here-
18 tofore or hereafter constructed) public buildings for the use of the
19 Commonwealth an official residence in the City of Harrisburg which
20 shall thereafter be used as the official residence of the Governor of

1 the Commonwealth State arsenals armories and military reserves State
2 airports and landing fields State institutions of every kind and character
3 (heretofore or hereafter constructed) additions and improvements to
4 land grant colleges school buildings and the furnishings and equipment
5 thereof for the use of the public schools State highways and bridges
6 toll bridges tunnels and traffic circles on State highways swimming
7 pools and lakes on State land low head dams improvements to river
8 embankments desilting dams impounding basins flood control projects
9 (and) the purchase of lands for rehabilitation purposes in connection
10 with State institutions and educational television stations(any and all)
11 the foregoing being herein called "projects") Provided however That
12 the purpose and intent of this act being to benefit the people of the
13 Commonwealth by among other things increasing their commerce and
14 prosperity and not to unnecessarily burden or interfere with existing
15 business by the establishment of competitive enterprises none of the
16 powers granted hereby (other than for the construction improvement
17 and maintenance of bridges) shall be exercised in the contruction im-
18 provement maintenance extension or operation of any project or projects
19 which in whole or in part shall duplicate or compete with existing

1 enterprises serving substantially the same purposes and the Authority
2 is hereby granted and shall have and may exercise all powers neces-
3 sary or convenient for the carrying out of the aforesaid purposes in-
4 cluding but without limiting the generality of the foregoing the fol-
5 lowing rights and powers

6 (a) To have perpetual existence as a corporation

7 (b) To sue and be sued implead and be impleaded complain and
8 defend in all courts

9 (c) To adopt use and alter at will a corporate seal

10 (d) To acquire purchase hold and use any property real personal
11 or mixed tangible or intangible or any interest therein necessary or
12 desirable for carrying out the purposes of the Authority and (without
13 limitation of the foregoing) to lease as lessee with the approval of the
14 Governor any property real personal or mixed or any interest therein
15 for a term not exceeding ninety-nine (99) years at a nominal rental
16 or at such annual rental as may be determined and with the approval
17 of the Governor to lease as lessor to the Commonwealth of Pennsyl-
18 vania and any city county school district or other political subdivision
19 or any agency department or public body of the Commonwealth or land

1 grant college any project at any time constructed by the Authority
2 whether wholly or partially completed and any property real personal
3 or mixed tangible or intangible or any interest therein at any time
4 acquired by the Authority whether wholly or partially completed and
5 with the approval of the Governor to sell transfer and convey to the
6 Commonwealth of Pennsylvania any project at any time constructed
7 by the Authority and any property real personal or mixed tangible or
8 intangible or any interest therein at any time acquired by the Authority

9 (e) To acquire by purchase lease or otherwise and to construct im-
10 prove equip furnish maintain repair and operate projects

11 (f) To make by-laws for the management and regulation of its
12 affairs

13 (g) To appoint officers agents employes and servants to prescribe
14 their duties and to fix their compensation

15 (h) To fix alter charge and collect rates rentals and other charges
16 for the use of the facilities of or for the services rendered by the
17 Authority or projects thereof at reasonable rates to be determined by
18 it for the purpose of providing for the payment of the expenses of
19 the Authority the construction improvement repair equipping furnishing
20 maintenance and operation of its facilities and properties the payment

1 of the principal of and interest on its obligations and to fulfill the terms
2 and provisions of any agreements made with the purchasers or holders
3 of any such obligations

4 (i) To borrow money make and issue negotiable notes bonds and
5 other evidences of indebtedness or obligations (herein called "bonds")
6 of the Authority not exceeding two hundred thirty-five million dollars
7 (\$235,000,000) in the aggregate and to secure the payment of such
8 bonds or any part thereof by pledge or deed of trust of all or any of
9 its revenues rentals and receipts and to make such agreements with the
10 purchasers or holders of such bonds or with others in connection with
11 any such bonds whether issued or to be issued as the Authority shall
12 deem advisable and in general to provide for the security for said bonds
13 and the rights of the holders thereof

14 (j) To make contracts of every name and nature and to execute
15 all instruments necessary or convenient for the carrying on of its
16 business

17 (k) Without limitation of the foregoing to borrow money and
18 accept grants from and to enter into contracts leases or other trans-
19 actions with any Federal agency

1 (1) To have the power of eminent domain

2 (m) To pledge hypothecate or otherwise encumber all or any of

3 the revenues or receipts of the Authority as security for all or any of

4 the obligations of the Authority

5 (n) To do all acts and things necessary or convenient to carry out

6 the powers granted to it by this act or any other acts

7 (o) To enter into agreements with the Secretary of Highways of

8 the Commonwealth of Pennsylvania providing for the construction or

9 reconstruction of highways and bridges by the Authority and the

10 acquisition of toll bridges by the Authority under such terms and con-

11 ditions as may be mutually agreed upon

12 (p) To acquite by assignment from the Commonwealth contracts

13 which are not completed and which involve constructing improving

14 equipping furnishing maintaining and operating the structures facilities

15 or undertakings similar to those designated herein as projects

16 Except as otherwise provided by law when projects are to be con-

17 structed improved equipped furnished maintained repaired or operated

18 for the use of any department of the Commonwealth as hereinbefore

19 listed in this section no plans or specifications therefor shall be pre-

20 sented for quotations or bids until such plans and specifications shall

1 have been submitted to and approved by the department of the Com-
2 monwealth which shall use such project the Department of Property
3 and Supplies the Department of Labor and Industry and any other de-
4 partment of the Commonwealth having any jurisdiction over the projects
5 so that the project will conform to standards established by these de-
6 partments

7 Provided further That the Authority shall have no power at any
8 time or in any manner to pledge the credit or taxing power of the
9 Commonwealth or any of its cities counties school districts or other
10 political subdivisions nor shall any of its obligations or debts be deemed
11 to be obligations of the Commonwealth or any of its cities counties
12 school districts or political subdivisions nor shall the Commonwealth or
13 any city county school district or political subdivision thereof be liable
14 for the payment of principal of or interest on such obligations

15 Section 2 The provisions of this act shall become effective im-
16 mediately upon final enactment

The General Assembly of Pennsylvania

SENATE BILL

No. 453 Session of 1953

Introduced by Mr. Wagner, April 8, 1953

Referred to Committee on Appropriations, April 8, 1953

AN ACT

Making an appropriation to the Department of Public Instruction for the
maintenance and operation of equipment for educational television

The General Assembly of the Commonwealth of Pennsylvania here-
by enacts as follows

1 Section 1 The sum of eight hundred fifty thousand dollars (\$850, -
2 000) or as much thereof as may be necessary is hereby appropriated
3 to the Department of Public Instruction for the two fiscal years be-

1 ginning the first day of June one thousand nine hundred fifty-three for
2 the payment of the costs of maintenance and operation for educational
3 television

APPENDIX B

Names of Those Attending the Exploratory Conference on Educational Television

July 7 - 8, 1952, at State College, Pennsylvania

ANGELL, Donald	Vice-President University of Penna. Representing the University and also the Committee on Educational TV in Greater Philadelphia
BENEZET, Louis T.	President, Allegheny College, Meadville. Representing The Penna. Association of Colleges and Universities of which he is now President
CARPENTER, C. R.	Head, Dept. of Psych., Penn State. Chairman of the Conference
CARTWRIGHT, John S.	Supt. of Schools, Allentown. Representing District Superintendents Section, PSEA
COOGAN, James H.	Assistant Director, Dept. of Public Information, Penn State
CLIPP, Roger	General Manager, WFIL-TV, Phila. Representing The Penna. Assn. of Radio and Television Broadcasters, of which he is now President
GOODALL, Ulna F.	Chief, Private Correspondence School Registration Representing the Penna. State Dept. of Public Instruction
HUNGERFORD, E. Arthur	Asst. Director, Educational Television Program Institute
KEARNEY, W. A.	Assoc. Director, Coll. Placement Service, Penn State. Representing the Pennsylvania State Education Assn.
McCOMB, R. W.	Librarian, Penn State
MARSHALL, Roy K.	Educational Director, WFIL-TV, University of the Air, Phila. Representing the University of the Air

MARTIN, Park	Chairman, Allegheny Conference on Community Development. Representing the Allegheny Conference Committee of Educators for an educational TV channel
NELSON, H. E.	Asst. Prof. of Speech, Penn State
NEUSBAUM, F. S.	Adm. Head, Motion Picture and Recording Studio, Penn State
PYLE, H. G.	Supervisor, Informal Instruction, Penn State
ROBERTS, John B.	Director of Radio and Television, Temple University. Representing Temple
SEIFERT, Carl	Exec. Sec., Penna. Assn. of Colleges and Universities. Representing the Association
SHINOL, Julian W.	Alternate for Mr. Hickey, Erie, Pa. Representing Erie Public Schools
SOLLENBERGER, D. R.	Harrisburg, Pa. Representing educational legislature
SWAN, Ralph C.	Supt. Perry County Public Schools, New Bloomfield, Representing County Superintendents Section, PSEA (of which he is now President) and also representing the Department of Administration, PSEA
TAIT, Elton D.	Asst. Prof. of Agric. Extension, Penn State
VANDERMEER, A. W.	Assoc. Prof. of Education, Penn State
VAN NESS, P. O.	Executive Sec., Penna. State School Directors Assn. Representing the Association
WALKER, Eric	Dean, School of Engineering, Penn State
WYAND, C. S.	Asst. to the President, Penn State

Mr. Viers W. Adams, Director of Special Services, Univ. of Pittsburgh, was to represent Pitt, but he was stricken with appendicitis Sunday the 6th.

APPENDIX C

COMMITTEES AND COMMITTEE MEMBERSHIPS, JCET-PENNSYLVANIA

Steering Committee

- Dr. C. R. Carpenter (Chairman), Department of Psychology, The Pennsylvania State College, State College, Pennsylvania
- Dr. Francis B. Haas, Superintendent of Public Instruction, Commonwealth of Pennsylvania, Harrisburg, Pennsylvania
- Honorable Fred P. Hare, Jr., State Senator, Harrisburg, Pennsylvania
- Mr. Carl E. Seifert, Executive Secretary, Pennsylvania Association of Colleges and Universities, State Theatre Building, Harrisburg, Pennsylvania
- Mr. John A. Cartwright, Superintendent of Schools, Allentown, Pennsylvania
- Dr. John Hickey, Superintendent of Schools, Erie, Pennsylvania
- Mr. Roger W. Clipp, General Manager, WFIL, Widener Building, Philadelphia, Pennsylvania
- Mr. Harvey E. Gayman, Executive Secretary, Pennsylvania State Education Association, 400 North Third Street, Harrisburg, Pennsylvania
- Father Francis Maguire, President, Villanova College, Villanova, Pennsylvania
- Mr. Park Martin, Executive Director, Allegheny Conference on Community Development, Pittsburgh, Pennsylvania
- Dr. John B. Roberts, Director of Radio and Television, Temple University, Philadelphia 22, Pennsylvania
- Mr. Walter A. Kearney, Executive Secretary, Room 468, Education Building, Harrisburg, Pennsylvania
- Miss Mary Catherine Welch, Associate Executive Secretary, Room 468, Education Building, Harrisburg, Pennsylvania

Committee on Objectives and Functions of Educational Television

- Dr. John B. Roberts (Chairman), Director of Radio and Television, Temple University, Philadelphia 22, Pennsylvania
- Mr. Ulna F. Goodall, Department of Public Instruction, Commonwealth of Pennsylvania, Harrisburg, Pennsylvania
- Mr. Herbert Lauterbach, President, Pennsylvania State Education Association, 400 North Third Street, Harrisburg, Pennsylvania
- Dr. Thomas E. Carson, Supervising Principal, North Allegheny Joint School District, R. D. #7, Pittsburgh 29, Pennsylvania
- Dr. John Hickey, Superintendent of Schools, Erie, Pennsylvania
- Dr. Willis Pratt, President, State Teachers College, Indiana, Pennsylvania
- Dr. Frederick Gruber, Assistant Professor of Education, University of Pennsylvania, Philadelphia, Pennsylvania
- Dr. Buell Whitehill, Chairman, Department of Speech and Drama, University of Pittsburgh, Pittsburgh, Pennsylvania

Dr. Barrett Davis, Chairman, Department of Speech and Drama, Lehigh University, Bethlehem, Pennsylvania
Mr. Frank Neusbaum, Director, Motion Picture Production Unit, The Pennsylvania State College, State College, Pennsylvania
Miss Martha Gable, Public Schools, Philadelphia, Pennsylvania
Dr. C. R. Carpenter, Department of Psychology, The Pennsylvania State College, State College, Pennsylvania

Committee on Commercial - Educational Cooperation

Mr. Roger W. Clipp (Co-chairman), General Manager, WFIL, Widener Building, Philadelphia, Pennsylvania
Dr. James Creese (Co-chairman), President, Drexel Institute of Technology, Philadelphia, Pennsylvania
Mr. Edward Lamb, 3016 State Street, Erie, Pennsylvania
Mr. Harold C. Lund, 1006 Riehl Road, Pittsburgh, Pennsylvania
Dr. Alfred Beattie, Superintendent, Allegheny County Schools, Courthouse, Pittsburgh, Pennsylvania
Honorable Fred P. Hare, Jr., State Senator, Harrisburg, Pennsylvania
Dr. C. Herman Grose, Deputy Superintendent of Public Instruction, Commonwealth of Pennsylvania, Harrisburg, Pennsylvania

Finance Committee

Dr. Donald K. Angell (Chairman), Vice President, University of Pennsylvania, Philadelphia, Pennsylvania
Mr. T. O. McCracken, Supervising Principal, Mildred Public Schools, Mildred, Pennsylvania
Dr. Harold Nelson, Associate Professor of Speech, The Pennsylvania State College, State College, Pennsylvania
Dr. Paul Anderson, President, Pennsylvania College for Women, Pittsburgh, Pennsylvania
Mr. P. O. Van Ness, Executive Secretary, Pennsylvania School Directors Association, Harrisburg, Pennsylvania
Dr. Paul S. Christman, Superintendent of Schools, Schuylkill Haven, Pennsylvania

Legal and Legislative Committee

Mr. John M. Lumley (Chairman), Superintendent, Sullivan County Schools, Dushore, Pennsylvania
Honorable Paul Wagner, State Senator, Tamaqua, Pennsylvania
Honorable W. Stuart Helm, Member of State House of Representatives, Kittanning, Pennsylvania
Mr. Robert Carson, Attorney-at-Law, Greensburg, Pennsylvania
Mr. Harrington Adams, First Deputy Attorney General, Commonwealth of Pennsylvania, Harrisburg, Pennsylvania
Mr. G. Baker Thompson, Assistant Superintendent, Delaware County Schools, Media, Pennsylvania

Technical Committee

(Although this committee was authorized, no appointments were accepted)

APPENDIX D

REGISTRATION LIST

CONFERENCE OF DELEGATES

JOINT COMMITTEE ON EDUCATIONAL TELEVISION FOR PENNSYLVANIA

NOVEMBER 19 - 20, 1952, HERSHEY, PENNSYLVANIA

Adams, Viers W.	University of Pittsburgh	Pittsburgh
Anderson, John D.	Tri State Area School Study Council	Butler
Anderson, Mrs. H. W.	Pennsylvania Division American Assn. University Women	Prospectville
Angell, Donald K.	University of Pennsylvania	Philadelphia
Arnett, Keeton	Allen B. Du Mont Labs, Inc.	Clifton, N. J.
Bachman, Fred H.	Dept. Pa. - V. F. W.	Hazleton
Balletta, A. G.	General Precision Lab.	Pleasantville, N. Y.
Banks, Mrs. R. S.	League of Women Voters	Philadelphia
Barker, Isabel	Department of Public Instruction	Harrisburg
Beattie, Alfred W.	Allegheny County Schools	Pittsburgh
Behringer, W. H.	Pa. Osteopathic Assn.	Allentown
Bennett, D. J.	Harrisburg Broadcasters	Harrisburg
Biemesderfer, D. L.	State Teachers College	Millersville
Boehm, Charles H.	Bucks County Schools	Doylestown
Bonnell, Allen T.	Drexel Institute of Technology	Philadelphia
Boyer, Lee E.	State Teachers College Faculties Association	Millersville
Brumbaugh, Harry	E-B Films	Reading
Brunton, William E.	Board of Public Education	Philadelphia
Burgoon, George R.	Gable Broadcasting	Altoona
Caldwell, E. J.	Gannon College	Erie
Cantor, T. E.	General Precision Lab.	Pleasantville, N. Y.
Carl, Kenneth E.	PSEA-Vocational and Practical Arts	Williamsport
Carpenter, C. R.	Pennsylvania State College	State College
Cartwright, John D.	Allentown Public Schools	Allentown
Chain, Mrs. S.	Pa. Federation of Womens Clubs	Norberth
Chandler, P. G.	State Teachers College	Clarion
Christman, P. S.	Schuylkill Haven Schools	Schuylkill Haven
Clements, W. J.	Department of Mines	Coaldale
Coira, Louise C.	Department of Health	Harrisburg
Cologne, Rose	Pa. Assn. for Adult Education	State College
Cressman, P. L.	Dept. of Public Instruction	Harrisburg

Cumpston, Mr.	Derry Township Schools	Hershey
Day, Harry P.	American Council on Education	Washington, D. C.
Denniston, A. Bruce	Altoona School District	Altoona
Dew, Dick	Pa. Newspaper Publishers Assn.	Harrisburg
Duckrey, James H.	State Teachers College	Cheyney
Edel, W. W.	Dickinson College	Carlisle
Edmonds, A. L.	Pa. State Chamber of Commerce	Harrisburg
Emery, Charles P.	Downingtown Joint Schools	Downingtown
Evans, Raymond F.	Derry Township Schools	Hershey
Evansha, Pauline G.	American Association of Uni- versity Women	Hazleton
Fenstermacher, V. H.	Hershey Junior College	Hershey
Fine, John S.	Governor, Commonwealth of Pa.	Harrisburg
Gable, Martha	Board of Education	Philadelphia
Gallus, Christine	Derry Township Schools	Hershey
Gayman, Harvey E.	Pa. State Education Association	Harrisburg
Glaspey, Mrs. R. M.	League of Women Voters	Philadelphia
Goodall, U. F.	Department of Public Instruction	Harrisburg
Hammond, W. Allen	Pa. Assn. of Private Academic Schools	Hershey
Hannum, M. E.	Franklin & Marshall College	Lancaster
Haas, Francis B.	Department of Public Instruction	Harrisburg
Heiler, Dick	WFBG-TV	Altoona
Hershey, Hohn O.	Milton Hershey Schools	Hershey
Hicks, Verna B.	Harrisburg School District	Harrisburg
Hildreth, Horace	Bucknell University	Lewisburg
Hocker, Margaret M.	Pa. Conference for Exceptional Children	Harrisburg
Houk, Dale W.	State Teachers College	Slippery Rock
Hungerford, Art	General Precision Laboratory	Pleasantville, N. Y.
Ingalls, Les W.	Assn. of Colleges and Universities New York	Albany, N. Y.
Jenkyn, Ross C.	Pa. State Dental Society	Harrisburg
Johnson, Lester O.	Gettysburg College	Gettysburg
Jones, Mrs. I. J.	Department of Welfare	Harrisburg
Kaltriter, Oren S.	Pa. Science Teachers Assn.	High Spire
Kapner, Leonard	WCAE	Pittsburgh
Kearney, Walter A.	Joint Committee on Educational Television for Pennsylvania	Harrisburg
Kessler, Edward J.	State Senator	Lancaster
King, A. S.	Derry Township Schools	Hershey
King, W. H.	N. J. Department of Education	Trenton, N. J.
Klonower, Henry	Department of Public Instruction	Harrisburg

Koch, Raymond H.	Derry Township Schools	Hershey
Kohn, Raymond F.	Radio Station WFMZ	Allentown
Krampholz, Lillian	Joint Committee on Educational Television for Pennsylvania	Harrisburg
Lange, George D.	Derry Township Schools	Hershey
Lewis, Daniel S.	Dept. of Classroom Teachers	Hershey
Lilley, J. K.	J. P. Lilley & Son	Harrisburg
Longenecker, H. E.	University of Pittsburgh	Pittsburgh
Lumley, John M.	Department of Public Instruction	Harrisburg
Luttringer, L. A.	Pennsylvania Game Commission	Harrisburg
Mahan, Jim	Photographer	Harrisburg
Markowitz, M. M.	American Legion	Harrisburg
Marbut, F. B.	Pennsylvania State College	State College
Marshall, N. M.	General Precision Laboratory	Pleasantville, N. Y.
Martin, Harry C.	Disabled American Veterans	Harrisburg
Master, Earl A.	Pa. Secondary School Principals	Reading
McGuire, F. X. N.	Villanova College	Villanova
McManus, Helen	Governor's Committee on Children and Youth	Harrisburg
Mease, Ivan L.	Governor's Committee on Employ- ment of the Handicapped	Harrisburg
Miller, F. K.	Lebanon Valley College	Annville
Mills, Mrs. Alfred K.	State Federation of Music Clubs	Annville
Morgan, James G.	State Teachers College	Mansfield
Morgan, Roy E.	WILK-TV	Wilkes-Barre
Nelson, Harold E.	Pennsylvania State College	State College
Noonan, J. F.	State Teachers College	East Stroudsburg
Ollendike, Clarence	Pa. Congress of Parents and Teachers	Scranton
Palmer, C. L.	Pennsylvania Medical Society	Harrisburg
Patterson, Carolyn	Public Schools	Pittsburgh
Pratt, Willis E.	State Teachers College	Indiana
Prattis, P. L.	Governor's Committee on Children and Youth	Pittsburgh
Pyle, Hugh G.	Pennsylvania State College	State College
Redmond, A. K.	Radio Station WHP	Harrisburg
Reed, Paul C.	Joint Committee on Educational Television	Washington, D. C.
Reed, R. D.	Pennsylvania Game Commission	Harrisburg
Reiley, E. P.	Pennsylvania Manufacturers Assn.	York
Roberts, A. Myfanwy	Pennsylvania Council of Churches	Harrisburg
Roberts, John B.	Temple University	Philadelphia
Rohrbach, Daniel	AVID of Pennsylvania	Boyertown
Rohrbach, H. N.	State Teachers College	Kutztown



